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THE

AMERICAN ENGINEER

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CORRECTION: **(*)The American Engineer notes with regret that the photographs of N.S.P.E. Vice President Bruce Williams on page 21 and Harvey R. Hawgood, author of the article on page 6, have been transposed in the February Issue. Sincere apologies are offered to both men.**

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The Engineer and War

WHAT WILL BE HIS FUTURE ROLE

Has Mankind the Capacity For Peace

The approach of spring brings signs of surcease in the European theatre of military operations. That the suspension of the clash at arms, which has shaken western civilization during the past six years, may not portend an era of economic misery serving only as a prelude to another war is the silent prayer of an apprehensive world. Aside from within the Americas, exhaustion trails close upon the heels of all combatants, victor and vanquished alike, and the will for a better society may be forced to yield to the impulse of self-preservation.

When this greatest martian blight of all time shall have run its course and the dogs of war shall have been chained to the kennels of wearied arms, the problems of reconstruction and rehabilitation will impose civil tasks of a magnitude heretofore undreamed of, save by few of this or any generation. To bind up the wounds of humanity and restore the aspirations of civilized society calls for unbounded faith, imagination, knowledge and resolution. Has mankind the will and the way?

In the midst of a sea of desolation, with perhaps more despair than determination fringing its shores, the scientist and engineer stands as a colossus without whom mankind cannot build anew the physical identification of a civilized society. Men and nations will turn to him in the hour of peace as they have in the darkness of war and he will respond. But are his efforts to be ever destined to the ends of expediency? Is he never to have a voice in the use to which his knowledge and skill are committed? Must he continue to occupy the paradoxical position of Master Builder and Master Destroyer until a world of ruined works calls him before the bar of humanity to plead, if not for survival, at least for extenuation of his ultimate performance?

In all truth, it will not be the scientist and engineer, who is but human and subject to the same decrees of society as other men, that will be on trial in such an event, but rather the capacity of man to rule himself and to place himself in proper perspective in the universal scheme. His inability to save society from the destruction inherent in the cosmic forces which he blithely attempts to turn to his own selfish ends is but the demonstration of his impotence. Enlarged by centuries of accumulation, knowledge has placed in the hands of men ever increasing dominion over the land, the sea and the air of this planet. It has revealed an apparently limitless horizon of potential human endeavor. It has provided man with endless inspiration and increased ambition to explore the unknown. But strangely it has lessened, rather than increased, his respect for the Intelligence that lies behind the Universal order which he seeks to explore.

Society in general accepts with little reflection the utilization of natural phenomena for its own ends. While justification for such attitude cannot be set forth, there is perhaps room for a degree of extenuation on the ground of mass ignorance of the workings of physical nature. For the scientist and engineer, however, there can be neither explanation nor extenuation. Priviledged to draw the veil on nature's inexhaustable store house and to act as the High Priest of such knowledge as has been made manifest through the discovery and application of the immutable laws ordained by the Great Engineer of the Universe, he cannot claim immunity from the effects of the miscarriage of his contributions to civilization.

To be accorded the opportunity for enlightened communion with physical nature is to enjoy one of the rarest of earthly privileges. It also imposes one of the greatest of human obligations. To use wisely and well knowledge of science is a trust that requires a moral foundation which vies with that required of him who serves in the field of spiritual endeavor.

Probably no calling has functioned less selfishly, so far as its practitioners are concerned, than engineering. However, the engineer's moral responsibility does not end with himslf. The time is approaching when he, together with the scientist, will be forced to appeal to world opinion — in an effort to convince mankind that science and engineering must be used, directed and regulated by men in whom the moral sense is as highly developed as is the intellectual faculty.

Throughout history warfare has become increasingly an engineering undertaking. Future conflicts, and one cannot overlook human nature despite his proposals and hopes, will undoubtedly be conceived and executed from engineering premises. Even now the warfare of tomorrow is being envisioned as a joint endeavor by general staffs composed of professional soldiers and professional engineers. Military strategy and control is giving way, perhaps reluctantly, to engineering decision and direction. Thus the role of the Engineer as a means to the ends of war looms even larger on the horizon of tomorrow. Can he, through the medium of power inherent in knowledge supported by moral convictions, turn his new role toward the ends of peace?

To become a factor in the policies of men and nations, organized endeavor is indispensable. Labor, as a result of intensive organization is already a dominant factor in national affairs and shows signs of emerging as an international influence second to none. If present trends continue, and there is justification for believing they will, the voice of Organized Labor will outweigh that of any single element in deciding future world affairs. Its opportunity for subserving the ambitions, born of imperialism, trade and other basic causes of war, to the economic welfare of the masses of mankind will be great indeed and, properly directed, such power might prove a real step toward the maintenance of peace.

If Labor organized, is a potential force of such magnitude as to cause serious reflection, why could not science and technology, organized in the interest of peace exert an equal influence, through the power born of a knowledge without which modern warfare could not be carried on? The organization of all scientific endeavor, including engineering, medicine, chemistry and other kindred callings, for the prevention of war, might be a move worthy of a great and privileged profession. One must frankly express the opinion that the idea wears the habit of impracticability. However, an organized world of labor is to date an idea. In fact a workable world organization of any kind is as yet but a hope. To mold and weld the divergent thoughts of a single group of mankind is, even to the most optimistic, a task well nigh unsurmountable, although a consummation devoutly to be wished.

In any event, an organization born of science has one less basis for internal disagreement. There can be no national or international perspectives — the premises from which it springs are universal.

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POST WAR ENGINEERING

A WIDE AND DIVERSIFIED FIELD

AWAITS THE AMERICAN ENGINEER

LATIN AMERICA, EUROPE AND ASIA

WILL COMPETE WITH THE UNITED STATES

FOR HIS PROFESSIONAL SERVICES

BY RAGNAR BERG

RAGNAR BERG
Chief Engineer
Koppers Company

Note: This address was recently delivered at the Annual Meeting of the Pittsburgh Chapter of the Pennsylvania Society of Professional Engineers. The author, Ragnar Berg, who is Chief Engineer of the Koppers Company, presents an attractive picture of the engineers' opportunities for playing a leading role in rebuilding and expanding the facilities and productiveness of four continents. In so doing, he offers some counsel to Americans going to foreign lands for the first time. Experienced travelers know only too well the value of Mr. Berg's suggestions.

When asked to prepare an address for this occasion, I was afforded the opportunity of choosing my own subject. This is what I call "Freedom of Speech". I believe that no one is really interested in his past, and our present troubles and tribulations we know only too well. What we really would like to know is what is coming — what is in store for us engineers during the next few years. I, therefore, would like to discuss "Post War Engineering".

The activities of the engineers depend very largely on the activities of our industry in general, and in order to make any forecast of the immediate future of the engineering profession, it is necessary to analyze the probable post war program of the American industry. There are two schools of thought how the industry should be allowed to function: During the war it is, of course, necessary for a certain amount of government control, and some people seem to think that a large amount of government ownership of industrial plants is a desirable thing. Another school of thought is that government ownership and control should be relinquished at the earliest possible moment when it is no longer required by the war effort and that we should revert to private enterprise to the largest extent. I hardly have to tell you to which school I personally belong. It is a matter of record that both political parties in the recent election campaign promised that private enterprise would be encouraged in every way, thus conserving the method of the American way of doing business which has been so successful in the past and has carried our nation to its present leading place in industry and commerce.

Many have expressed their doubts and fears that when the production for the war ceases we will again take a tailspin into a new depression, perhaps worse than we experienced in 1929 and the early thirties. I feel sure that with wise leadership such a calamity can be averted. There will be a great demand for consumer goods which has not been satisfied during the war years because most plants had to be converted to war production, and there is a great amount of dammed-up purchasing power which will be released as soon as these products are available on the market. There will also be a large scale replacement of worn out plants which have been kept on production during the war, although obsolete, and there will be many new plants built to produce for peace time use new products and material which have been developed during the pressure of war.

Without doubt, there will be a great housing program carried out, and although this will to a large extent be handled by our friends, the architects, the engineers will have to make the general planning and they will build the plants and the tools for making the material that goes into this program. Anybody who has made a trip through our Southern states, and who has seen the living conditions of our people in the back country, will speak softly about the high standard of living in America. And you do not have to travel far to discover the need for improved homes for our people. In all our large cities, and Pittsburgh is no exception, there are vast areas of sub-standard dwellings which should and must be replaced. There is, therefore, a tremendous job ahead to give decent housing and healthful living conditions to our ever increasing population.

We also know that the Federal Government, the States, and many municipalities are planning a post war road building program that will be a joy to our civil engineers and land surveyors.

There will be a great program of research in every field of engineering which will give added employment to engineers and working men when new processes emerge from the laboratory and are translated into industrial plants. The research work is now carried out by the research departments of private companies, by special research institutes, by the research staffs at our universities, and by a number of government agencies. During the war

a beginning has been made to better coordinate the work of these various research agencies. Much still remains to be done to facilitate a free exchange of information and eliminate the waste in money and effort caused by overlapping investigations.

The results obtained in the last few years by all these activities promise well for the future, and it may be interesting to take a quick glance at some of the things accomplished.

We have learned how to make synthetic rubber from butadiene and styrene, using alcohol or petroleum as raw material, and several large plants are now in operation.

The research work on the treatment of wood has made giant strides and still marches on. It has been found that by compressing ordinary soft wood, it can be made as structurally strong as the best hard woods known; in fact, some of these prepared sheets of wood have the strength of mild steel. New glues have been developed which make it possible to prepare laminated wood products which compete with structural steel as building material for roof trusses, bridges, boats, airplanes, and other structures where strength and lightness are required. It is possible that our post war cars will roll on wooden tires, that is tires made from synthetic rubber, where the raw material is ethanol produced from wood, and where the usual cotton fabric has been replaced by fibres made from cellulose derived from wood.

There is a whole new science in the production of plastics and in the years to come we will find that many things formerly made of metal will be fabricated of different kinds of plastic material. The research work in the glass industry has widened the horizon for this special field to include such things as unsinkable glass boats and fireproof textiles. We will soon have in our homes curtains, draperies, and upholstery made from woven glass fibers. This should be a God-send to the absent minded guest who is in the habit of leaving a burning cigarette on the arm rest of his chair.

In the coke industry there seems to be a tendency to go further in the development of the by-products of the distillation of coal and to add to the standard coke plant the equipment required for the production of new chemicals with long and fascinating names.

Our aeronautical engineers have done a marvelous job during this war and if it had not been for the lack of vision of some die-hard conservatives among our army and navy men we would today have planes which could bomb Tokyo from bases in Alaska. The post war period will see a tremendous development not only in civilian aviation but also in new military planes. Every nation now knows that military power in the future means air power.

It seems, therefore, that a short review of the possibilities of domestic production should assure us that there is promise of great industrial activity, and therefore a prodigious amount of work for the professional engineers. Let us now take a look at what we may expect in the way of foreign business. The three great fields for foreign activities are Latin America; Europe, with which I will include all of Russia; and China. Personally, I do not believe that there will be a great amount of work for American engineers in South America. There is at present a certain tendency in the South American Republics to build up a national heavy industry, but I have the impression that this construction program will be of a limited extent. Mexico, however, presents a different picture due to the rich natural resources of that country and its present state of undevelopment.

Let us now take a look at the situation in Europe. There has been great destruction in the countries overrun by the Germans; part of their equipment has been destroyed; another part has been removed and re-erected in plants inside Germany. There will be a large scale rebuilding program for France, Belgium, and Holland, and this will very likely be carried out in two phases; one will be the immediate rehabilitation of plants, such as the public utilities (light, power, heat, water, gas works, etc.) to satisfy the most urgent needs of the communities, and a building up of their communication systems. Then there will be a long term program when the industries of these countries will be remodeled, re-grouped, and organized in a much more economic way than heretofore. This would involve the abolishment of a number of small installations and their concentration into larger units which could be operated more economically. In all this work I am sure that American engineers will have a great opportunity to serve as I feel that the American experience in this kind of work is superior to what can be furnished by the local talent. I know that a number of American engineering companies are already taking steps to establish branch offices in Europe and quite likley some of you who are here tonight will have an opportunity to take part in this work.

What the future of Germany will be is hard to foresee at this time. Several plans have been advanced for the treatment of Germany after it has been defeated, but whatever plan is adopted I do not think that Germany will be a customer of ours either for material or for engineering services. It seems to me very likely that German industry will be reduced to a capacity commensurate with the needs of the German people and with sufficient surplus production to take care of a legitimate exchange of goods with its neighbors. During the years before the war the German heavy industry was built up far above the requirements of the German nation for the sole purpose of creating the necessary capacity to wage a world war. A great part of these plants will undoubtedly be destroyed by the acts of war, but if enough of these plants are left when Germany is vanquished to still give them a potentiality for war making, I feel sure that the Allies will insist that such plants be dismantled and their equipment moved to the countries which have been devasted by the Germans in this war.

Russia will certainly for many years to come be one of our greatest customers; however, she will probably continue the practice she has already been following during the last few years; namely, to have engineering firms over here prepare the plans for Russian plants and furnish most of the equipment from American factories. The actual

building of the installations the Russians prefer to have carried out by their own people.

The devastation of England has probably been greater than we here in America realize. To avoid giving comfort to the enemy the whole story cannot yet be told, but from the White Paper published only a few days ago by the British Government we get an idea of the stupendous task of reconstruction that lies ahead. This work will certainly be handled mainly by the British engineers themselves, but they will need much material from us in the post war years. As every third house in England has been destroyed or damaged there will be a tremendous demand for prefabricated houses and a large part of that demand will certainly be filled by American export just to mention one example.

I have not yet said anything about the neutrals in Europe. With these countries the usual peace time trade has been greatly disrupted by the war and without doubt normal relations will be again taken up when peace comes and we can then expect a strong revival of trade. Sweden has already had a Trade Commission over here to arrange for postwar shipment of American goods. There is also another development in Sweden which I believe would be of interest to Americans and that is the very fine system they have set up to coordinate their research work. I feel that when travel is again possible some of our research men will profit by making a study of this system. The attitude of some neutrals has sometimes been criticized and frequently misunderstood. The other day a chap told me a story about two Irishmen who were talking about the neutrality of Ireland and Sweden. One thought that it was truly remarkable how these two countries had been able to keep out of this terrible war. Then the other sighed and said: "Yes, just think of it. We peace loving Irish and those cowardly Swedes."

When I listed the foreign fields which would offer possibilities for American engineers and business in the years to come, I also mentioned China. In my opinion there are great possibilities in China for industrialization and for the creation of a market as soon as the standard of living of China's teeming millions can be raised. During the last two or three years, the Chinese government has sent young Chinese university engineers over to America to study our different industries, the idea being that after they had familiarized themselves with different branches of American engineering they would then return to their homeland and become key men in the different lines of industry. We have also been advised by the State Department that another Chinese Commission of a different type is now coming to visit America. This commission consists of leading industrialists who will make the final decisions about what plant will be built in China, where and when. These men will make connections with American engineers and manufacturers. The vanguard of this commission has already arrived, and the other day I received in my office a visit from two of these men: Mr. Kang Liu, General Manager of the Tse Ho Steel and Metallurgical Works, and Mr. Chih-Hsi Wang who holds a similar position with the Yunan Iron and Steel Works. Kang, Wang and I spent a very interesting day together and they gave me a pretty good idea of their plans. They also very kindly invited me to a fishing trip on the Yangtze river. The reconstruction of the Chinese industry evidently has to be taken in two steps: Before the Japanese are driven out of China a certain building program must be initiated in the unoccupied part of China. This construction will be temporary and the type of plant should be as inexpensive as possible. The centers of population and of raw materials are in the east and the north now occupied by the Japanese army and when these districts are freed then the intention is to build permanent and up-to-date plants in locations which offer the best economical advantages. I feel that the American engineers will play a very great part in this development.

The method of American engineering companies to be used in obtaining foreign business may vary, but I think it is evident that in most cases a large part of the material going into the foreign plants will have to be manufactured in the country where the plant is being built. In the years between the two wars I was the representative of my company in Europe, with offices in Paris. We had chosen as a method of operation to associate ourselves with local companies who did the actual manufacturing and construction of our plants, while the technical supervision was furnished by the Americans. This, I believe, is a very satisfactory solution if you are careful in selecting the companies with which you are dealing. Another method is to establish American owned and American manned subsidiary companies abroad. This scheme has certain advantages, but the risks are so much greater.

To any of you who may for the first time be placed in a position to represent American engineering companies abroad, I, as an old-timer, would like to give some fatherly advice. It is extremely important that you are able to speak the language of the country where you are located. If you are going to China, you better brush up on your Chinese. Many say that you can travel all over Europe and get along well with English. This is true if you stick to the beaten path of the tourist, but if you are going to meet foreign business men and engineers on an equal footing you are greatly handicapped if you cannot talk to them directly, but have to convey your ideas through an interpreter. If you should happen to be stationed in France do not believe that your two or three years of high school French will see you through. I came to Paris the first time as a school boy very proud of my knowledge of French. The first morning I went into a store to buy some films, using my very best French pronunciation, the man back on the counter looked at me with surprised eyes and shrugged his shoulders. I repeated my request, this time a little louder. When you talk to foreigners and they don't seem to understand you always think they are little deaf. This time he lifted his hands in despair and said: "Mais Monsieur, est ce que vous ne parlez pas francais du tout?" "Don't you speak any French at all?" Evidently, I did not. I only thought I did.

Advice No. 2. It is always wise to soft pedal any expression of your home town pride. Your own native city

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CORPORATION PRACTICE OF ENGINEERING

NO MORE JUSTIFIED THAN THAT OF OTHER PROFESSIONS

PERMISSIVE PROVISIONS OF ENGINEERING ACTS

SHOULD BE ELIMINATED THEREFROM

DECISIONS OF HIGH COURTS INDICATE

THAT CHARACTER AND QUALIFICATION ARE PERSONAL

BY S. L. STOLTE

S. L. STOLTE, *President*
Minnesota Association Prof. Engineers

The author makes a strong case for removing from Engineering Registration Acts the exemptions and exceptions that apply to the practice of professional engineering in certain states. The contention is made "that it is a fundamental rule of law that although corporations are free to engage in any lawful business or to follow a trade, they may not practice a learned profession." While some engineering laws prohibit corporation practice others still permit that which is generally outlawed by other professions. The unfortunate fact is that some engineers are reluctant to recognize that the welfare of the profession should be paramount to any individual considerations.

One of the greatest decisions that has to be made by the individual in the engineering and architectural professions is whether they want to carry on a professional practice and all that it implies, or whether they want to continue in a compromising position and not enjoy, as a profession, the respect and esteem gained by other learned professions, such as law, medicine and dentistry, who have long since made this basic determination. The United States Supreme Court, in specifically placing a chemist within the learned professions, says that there were originally three professions, namely law, medicine and theology, but that other lines of endeavor have climbed and are climbing to the same plane and should be so classified. As the Supreme Court of Louisiana has pointed out, a mere act of the legislature, in styling a calling as a profession, is not enough to make it such. The calling must merit the professional title by its actual practice.

It is a fundamental rule of law that although corporations are free to engage in any lawful business or to follow a trade, they may not practice a learned profession. Thus, it has been decided specifically that a corporation has no power to practice law, medicine, dentistry or optometry, or, in general, to hire practitioners to carry on such a business for it. At least one court has actually gone so far as to dissolve a corporation for practicing a profession; but there have been no decisions holding that a corporation may not practice engineering, although the Pennsylvania Supreme Court has held that a corporation may not practice engineering unless the plans et cetera are signed by a registered engineer. It is well to know at this point that the same Court and others have held that a corporation cannot qualify for a license to practice engineering, having neither character nor ability to take the rigid examination required by statute.

A professional man stands in a fiduciary or trust relationship toward his client, while a corporation owes a fiduciary duty to its stock holders only. The opinion of the New York Court of Appeals, in refusing to allow a corporation to practice law, furnishes a perfect illustration, and has been widely quoted with approval by the appellate courts of other States:

> "The practice of law is not a business open to all, but a personal right limited to a few persons of good moral character, with special qualifications ascertained and certified after a long course of study, both general and professional, and a thorough examination by a state board appointed for that purpose. The right to practice law is in the nature of a franchise from the state, conferred only for merit. It cannot be assigned or inherited, but must be earned by hard study and good conduct. It is attested by a certificate of the supreme court, and is protected by registration. No one can practice law unless he has taken an oath of office and has become an officer of the court, subject to its discipline, liable to punishment for contempt in violating his duties as such, and to suspension or removal. It is not a lawful business except for members of the bar who have complied with all of the conditions required by statute and the rules of the courts. As these conditions cannot be performed by a corporation, it folows that the practice of law is not a lawful business for a corporation to engage in. As it cannot practice law directly, it cannot indirectly by employing competent lawyers to practice for it, as that would be an evasion which the law will not tolerate. "Quando aliquid prohibitur ex directo, prohibitur et per obliquium." Co. Lit. 223.
>
> "The relation of attorney and client is that of master and servant in a limited and dignified sense, and it involves the highest trust and confidence. It cannot be

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THE POSITION OF N. S. P. E.

RECENT TENDENCIES OF FOUNDER SOCIETIES TO EXTEND THEIR OBJECTIVES AND ACTIVITIES BEYOND SCIENTIFIC AND TECHNICAL ASPECTS SUGGEST A NEED FOR COMPLETE UNIFICATION UNDER PROFESSIONAL ORGANIZATION LEADERSHIP

By CHARLES W. CROUCH

CHARLES W. CROUCH
Dayton Society Prof. Engineers

Referring to an article in a recent issue of the Electrical Contracting Magazine that suggests the advisability of a nation-wide association of engineers, embracing all branches of that profession, the writer, in accepting the arguments offered, justly expresses surprise that Mr. C. A. Powel, President of the American Institute of Electrical Engineers, likewise urging unification, ignores the fact that N. S.P.E. provides that which he professes to seek. This is but one of many instances wherein representatives of the Founder Technical Societies proclaim the need for something which already exists; which was founded for the very purposes these spokesmen set forth and which is already the spokeman for twenty six state professional engineering societies.

Among the many problems facing the rapidly developing National Society of Professional Engineers, is the question of that Society's status within the entire Engineering Profession in the near future, and especially in the Post War period. The most important aspect of this problem, is the relationship between the N.S.P.E. including the Member State Professional Societies, and the older technical "founder societies"!

The present situation has been brought to the attention of the writer, by several recent articles in technical periodicals.

In the "President's Letter", appearing in the October 1944 issue of the *Ohio Engineer,* President Rolph states that, "There is a clear distinction between the many technical societies and the one professional society". With reference to the founder societies, Engineer Rolph says, "The technical society is interested in only one branch of engineering and operates in the technical aspects of that branch. It provides the means for keeping its members up to date in the technical aspects of their practice."

In differentiating between the technical societies and the professional society, President Rolph goes on to say, "The professional society, on the other hand, operates in the field of the professional activities of the engineer. It is designed to secure a unit of professional thought and action among all classes of engineers, to emphasize ethical conduct and proper practice of the profession and to build up public appreciation of engineering as a profession. It keeps close to the legislative activities which may affect the practice of the profession and the relations between the professional man and the public."

These statements are quoted because they define most clearly and concisely, the differentiation in question. President Rolph is to be commended for thus clarifying a heretofore hazy and misunderstood situation.

If the entire profession understood these facts, and placed the various engineering organizations in their true and proper relations, the present situation which prompted this discourse, would soon dissolve and the engineering profession would find new strength in unity.

Unfortunately, there are several prevailing conditions which illustrate the present disunity within the profession, clearly pointing to the necessity of further education concerning the professional movement through the N.S.P.E. To illustrate this point, let us review an article which appeared in the October 1944 issue of the *Electrical Contracting Magazine* entitled "Nation Wide Association of Engineers Favored". The article reads as follows:

"A nation wide association of engineers, embracing all branches of that profession, was advocated recently by C. A. Powel, newly-elected president of the American Institute of Electrical Engineers, and an international authority on power plant problems.

Speaking before the Los Angeles Section Meeting of the AIEE, Mr. Powel declared that 'in a world where scientific knowledge and engineering achievement are shaping our habits of thought and life, there is urgent need for an all-inclusive organization that can speak for engineers in the councils of government and the ranks of industry.'

Mr. Powel, who is manager of Headquarters Engineering of the Westinghouse Electric and Manufacturing Company, said that such an organization must have 'constant and intimate contact with the rank and file of engineers and must bring its weight to bear in community and civic affairs.

'The desire for collective action', Mr. Powel stated, 'is as powerful as among members of labor or white-collar unions. What form that collective action should take is the main question facing members of the profession today'.

Two plans of joint action have already been tried,

he reported. The first, put into effect by the American Society of Civil Engineers, authorizes local sections of the ASCE to set themselves up as collective bargaining units. The second plan favors the inclusion of engineers in the general 'white-collar unions'.

'Both of these plans offer serious difficulties,' Mr. Powel asserted. 'The first would probably mean the elimination of supervisory workers from the bargaining units and in addition present a number of legal obstacles. The second plan, while attractive in some respects, has several disadvantages.'

'In any concern, no matter what size, the relation of engineers to draftsmen, clerks, accountants and others is almost of necessity small. In addition, the engineer would be subjected to decisions and rules which are clearly intended for a great majority of men doing an entirely different class of work.'

He disclosed that the AIEE had formed a joint committee with the American Society of Mechanical Engineers to investigate the subject of collective bargaining units for local Society sections, and added that 'their preliminary study has brought out the tremendous difficulties of such a plan'."

It is indeed surprising that as capable and experienced a man as Mr. Powel can be ignorant of the very existence of the N.S.P.E., especially since he has so ably expressed the aims and purposes of that organization. It is difficult to understand how the president of the A.I.E.E. can be either ignortant of the policies of the N.S.P.E., or opposed in any way to the legal registration or licensing of engineers. As far as the collective bargaining problem and other issues broached by Mr. Powel are concerned, it should be generally known among Professional Engineers, that the Officers and Directors of the N.S.P.E. have announced policies which under present circumstances at least, offer the most logical and professional solutions.

Does not this illustration indicate that even among engineers of all categories, professional or un-licensed, as well as the general public,—the purpose, aims, and position in our national life, of the N.S.P.E., are not realized to any appreciable degree!

Another aspect of the present situation can readily be seen in a recent statement made collectively by the presidents of the five leading founder societies. The heads of these organizations went on record with a very commendable statement denouncing the proposed plan to make Germany a non-industrial, purely agricultural state after the war. They added that such a program, if enforced, would "plant the seeds" of a Third World War. This announcement plus the statement that the engineer should have a seat at the peace table, indicates the trends of thought and the desires of the leading socially minded engineers, to seek and accept more and more social and civic responsibility in the Post War period. There was no mention that the N.S.P.E. had played any part in the above action.

Again, witness the action taken at a recent meeting of the Engineers Council for Professional Development. The E.C.P.D. accredited and approved courses taught in technical institutes all over the country. This action, taken periodically for the past ten years, is done at the request of these leading technical instiuttes to insure adherence to proper educational and professional standards.

The E.C.P.D. is composed of representatives of the five major engineering societies, the Engineering Institute of Canada, the Society for the Promotion of Engineering Education, and the National Council of State Boards of Engineering Examiners. Undoubtedly, many of the personnel of the above organizations are licensed professional engineers and members of the N.S.P.E. However, the latter organization, officially was not mentioned as having taken any part in this progessive and essential program.

If the Profession of Engineering is to be elevated to its proper and well-earned position alongside the legal and medical professions, the one and only legally recognized and official organization in the profession to supervise and accomplish this tremendous task is The National Society of Professional Engineers. This task is undoubtedly recognized and accepted by most licensed professional engineers since many forward steps are currently underway to promote the professionalization of engineers and to place the N.S.P.E. in its true position.

However, the above instances point toward the unfinished position of this great task of uniting and coordinating all the present overlapping and sometimes disjointed activities of the various organizations mentioned. One of the greatest single strides in the right direction would be a definite program to promote and accomplish the licensing of at least a majority of the present membership of the "founder societies". With their powerful collective support, Engineering would quickly assume its professional maturity.

Since the "founder societies" are at present, going beyond the scope of their original intent and organization in developing interests and promoting actions of a purely professional nature, they are certainly cognizant of the urgent necessity of a truly all-inclusive national professional society. These activities develop quite naturally, since the "founder societies" include within their membership, most of the leading engineering authorities of the country. These leaders see beyond the technical aspects of engineering and appreciate the true importance and obligation of the engineer toward the national welfare of this country.

Every existing group of a technical, professional development, and educational nature should be brought under the single jurisdiction of the N.S.P.E. If all these organizations are "professionalized" in the near future, all such actions, programs, and other activities as described above, would be unified and promoted in a straight forward, logical manner under the authority and leadership of the N.S.P.E.

Then and only then, can the National Society of Professional Engineers, have accomplished its true purpose, according to its Constitution, to dedicate itself, as an educational institution, to the promotion and protection of the Profession of Engineering as a social and economic affairs of men and of the United States."

HART CRANE AND THE BRIDGE

IMPRESSIONS INSPIRED IN A POET BY A GREAT HUMAN ACHIEVEMENT TOGETHER WITH SOME FLIGHTS INDULGED BY HIS ENGINEER REVIEWER

DAVID B. STEINMAN

DR. D. B. STEINMAN
Past President, N.S.P.E.

In the commentary published herewith, which was written as a result of research incident to a work entitled "The Builders of the Bridge", the author, David B. Steinman, distinguished engineer and first president of the National Society of Professional Engineers, gives play to some flights of thought and language worthy of the subject of his reflections. Some one has said that the poet and the mathematician have been cast from the same mould.

Hart Crane and "The Bridge"

In 1924 a young poet was living at 110 Columbia Heights in Brooklyn—within the range of the harbor and its sea-sounds, within the spell of the Bridge and its magic beauty. Hart Crane was a strange seer of timeless vision, a fevered mystic who felt the impact of inchoate forces. He sang of machines and cities, of the ear-tang of the workers, of the warring hungers of lonely and herded men. In the sensitive quest of the mystic to find symbolic expression of the intimate sense of continuity between his self and the cosmos, and in the desperate impulse of the poet to create rhythmic order from the chaos which overwhelmed him, he sought unitary theme to integrate the exuberant flood of his impressions; and he found this unifying poetic principle in the symbolism of the great arching link that man had built in vaulting height above the tides. By the fall of 1925 he had achieved the pattern of his composition, and in December 1929 he completed the poem—the crowning work of his life.

Seemingly some mystic spiritual echoes had lingered there—for, ere the final stanzas were penned, Crane learned that the house in which the vision of *The Bridge* had first come to him, and where he presently finished the poem, had once been the home of Washington Roebling, and that the very room in which the poet lived and wrote had been used by the paralyzed engineer of the Brooklyn Bridge as an observation tower to watch the construction of the span. After the lapse of half a century, in the same house and in the identical room, and inspired by the same objective vision, another human should in fevered travail make its bid for immortality. Never again did Hart Crane attain the same height of poetic creation. Three years later, returning from a visit to Mexico, he walked to the stern of the *Orizaba*, quietly took off his coat, and leaped into the embrace of the warm sea he loved.

The poem, with a study singing cadence like the march of the pioneers, depicts kaleidoscopically the cavalcade of our civilization—the emergence of our industrial world of power and speed from the naked and colorful base of old America. *The Bridge* is the unifying vision, the mystic link—to synthesize the world of chaos. Made by man, with his new power—the machine—the great span joins city, river, and sea; parabolawise, it shall vault the continent and, transmuted, it shall reach that inward heaven—the fulfillment of man's need of order, the exaltation of man's soul.

The *Poem* is captioned: TO BROOKLYN BRIDGE

"How many dawns, chill from his rippling rest
The seagulls wings shall dip and pivot him
Shedding white rings of tumult, building high
Over the chained bay water Liberty—

Then, with inviolate curve, forsake our eyes
As apparitional as sails that cross
Some page of figures to be filed away;
—Till elevators drop us from our day ...

I think of cinemas, panoramic sleights
With multitudes bent toward some flashing scene
Never disclosed, but hastened to again,
Foretold to other eyes on the same screen;

And thee, across the harbor, silver-paced
As though the sun took step of thee, yet left
Some motion ever unspent in thy stride,—
Implicity thy freedom staying thee!

Out of some subway scuttle, cell or loft
A bedlamite speeds to thy parapets,
Tilting there momently, shrill shirt ballooning,
A jest falls from the speechless caravan.

Down Wall, from girder into street noon leaks,
A rip-tooth of the sky's acetylene;
All afternoon the cloud-flown derricks turn . .
Thy cables breathe the North Atlantic still.

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N. S. P. E. Board Meeting

HELD AT UNIVERSITY CLUB

PITTSBURGH—FEB. 9 AND FEB. 10

NEW BY-LAWS APPROVED

PRESENT DUES TO APPLY FOR 1945

Mrs. Lacey Coad Becomes Office Manager

(Reported by Charles Burke)

The first 1945 meeting of the Board of Directors of the National Society took place at the University Club in Pittsburgh on Friday, February 9th and Saturday, February 10th. Again The American Engineer expresses appreciation to Charles Burke, Chairman of the Committee on Constitution and By-Laws who has prepared the following report:

President H. E. Nold presided and there were present fifteeen (15) officers and directors of the Society.

President Nold, in a verbal report, advised that he had adopted the policy this year of having some of the Vice-President assist in visiting the various Member State Societies, and in accordance with that policy, Vice-President Lawrie attended the meeting of the Kentucky Society, Vice-President Williams attended the meeting of the Texas, Kansas and Missouri Societies, while the President attended meetings in Wisconsin and Illinois. He advised that the Wisconsin Society is in good shape and progressing fast, while the Illinois Society is, at the present time, diligently engaged in revising the definition of "Professional Engineer" and the licensing law to meet the objections heretofore raised by the courts in Illinois. At the present time, a new bill is being drafted, incorporating the new definition, and it is believed that this new bill, when presented, will have a good chance of passing the legislature.

Vice-President Lawrie, reporting for the Executive Committee, recommended that the Executive Secretary be instructed to appoint Mrs. Coad as Manager of the Society's Headquarters in Washington and to assign to her all routine matters of the office, so as to permit the Executive Secretary to devote his time to the more important matters of the Society and enable him to travel to the various Member State Societies, as necessity requires. A motion was made to accept this report and it was thereupon adopted.

The Executive Committee also reported on a matter that was referred to it with respect to the establishment of life membership in the National Society of Professional Engineers. The conclusion and recommendation to the Board was that life membership is not wise at this time, as the Society itself is very young and it was felt that it was not ready for such membership yet. This matter was presented in the form of a resolution, which was duly approved. The Committee presented a second resolution on a matter which came to it from the Pennsylvania Society with respect to the establishment of an international federation of engineers. The Committee recommended that the Society be in sympathy with the movement where it is in harmony with the Constitution of the National Society of Professional Engineers, but does not wish to affiliate in the movement at this time because the movement is one among technical societies, while the National Society is a professional organization. This resolution was adopted.

Budget Committee Report

1. The first recommendation provides that the salary of the Secretary be fixed for the year 1944 as $5,705.91 and for the year 1945 at $5,700.00. During the year 1944, there was a sliding scale, whereby the Secretary received a percentage of all income above a certain amount. In the year 1945, this sliding scale is abolished. This recommendation was approved.

2. The second recommendation made by the Budget Committee, provides, under the item of "Salaries," a sum of $15,200.00, which is an increase of $1,000.00 over this item in last year's budget, and it raises the budget total to $36,850.00. This recommendation was adopted.

3. The third recommendation of the Budget Committee provides that no expense shall be incurred over the amounts provided in the respective items of the budget without the approval of the Executive Committee.

4. The fourth recommendation of this Committee has to do with the traveling expenses of the Executive Secretary for a trip to the Far West. The Committee advised that this expense will exceed the amount provided in the budget but recommended that it be provided for and that items of traveling expense for other trips be curtailed, so as to help meet this added expense. It was felt that there is a real necessity to have the Executive Secretary visit such states as California, Washington and Orgon, stopping at other points on the way West, and the Board finally approved the recommendation of the Budget Committee.

The President brought up the matter of stenotyping the notes of the various meetings and suggested that possibly some financial saving might be effected if the Society did not distribute the complete transcript of the notes of each meeting to so many individuals. It was finally moved that the stenotype notes shall be taken of all meetings but shall not be sent out. Minutes of the meeting however, will be sent out to all interested parties, the same as at present. This motion was carried.

The Secretary reported on the condition of the Society. Excerpts from the report are:

Membership Of Society

Detailed membership reports as of December 31, 1944 show the following totals for active membership:

Total active	1944	1943
	8807	7150

Operation of Headquarters Office

During 1944 there was received at the Headquarters office a total of 5200 letters and postal cards, 834 pieces of miscellaneous material and form letters, and 1451 periodicals.

During the same period there were mailed out 4263 first class letters and postal cards, 2862 magazines, and 2428 pieces of parcel post and bulk mail.

The total mail handled amounted to 18,038 pieces, large and small, or an average of about 348 per week.

Member State Society Activities

During the past year the Georgia Society of Professional Engineers reported formation of local chapters at Savannah and Atlanta. The Texas Society reported new local chapters at Corpus Christi, Waco and Fort Worth.

The New Jersey Society performed an outstanding piece of work in the reorganization and revitalization of its local chapters.

The Wisconsin Society of Professional Engineers reported the organization of a local chapter in the Fox River Valley.

During the year member State Societies were requested to contact all regional Federal offices having to do with the administration of the Fair Labor Standards Act, and to urge the incorporation of the term "Professional Engineer" in the regulations, parallel to the terms "Law" and "Medicine". We have reports so far that the following member State Societies have made these contacts: Washington, Minnesota, Wisconsin, Kansas, Texas, Missouri, Indiana, Ohio, New York, Pennsylvania, Georgia, New Jersey and West Virginia.

During the year the Executive Secretary was present at the Annual Meetings of the following State Societies; Pennsylvania, New Jersey, Ohio, Connecticut, New York, Indiana. He attended the Regional Conference in Philadelphia, and the Semi-Annual Meeting of the New Jersey Society of Professional Engineers.

Two visits were made to Boston, Massachussets, and the groundwork laid for the reorganization of the Massachusetts Society of Professional Engineers.

Incidental to various trips and stopovers, personal visits were made with officials of the following member Societies: Rhode Island, Illinois, Minnesota, Maryland, Kentucky, New Jersey, West Virginia and Missouri.

Work With Other Organizations

The Executive Secretary attended the Annual Meeting of the American Society of Civil Engineers, the Society for the Promotion of Engineering Education, and the National Council of State Boards of Engineering Examiners.

The report of the treasurer was presented, and a copy of this report is also attached hereto. This report was received and filed.

The Constitution and By-Laws Committee, in reporting presented a set of By-Laws, which it recommended for adoption. These By-Laws were gone over one by one and with certain minor changes, were adopted. The principal item in dispute in these By-Laws had to do with the matter of dues, and in this respect, the Board finally decided in order that it have a set of By-Laws to guide it through the year, it would approve the By-Laws as presented and as amended by the Board at its meeting, with the understanding that, in the matter of dues, the By-Laws shall indicate that, for the fiscal year 1945, the dues for members who pay dues through Member State Societies shall be $4.00, and for members-at-large, the dues shall be $10.00. These are the same amounts as are being paid at the present time. The new By-Laws are now being put into shape but will not be ready for publication for a few weeks.

Applications for membership-at-large were approved for twenty (20) new members.

The Resolutions Committee presented five (5) resolutions as follows:

1. The Rhode Island Society requested that copies of "The American Engineer" be sent from National Headquarters to engineering colleges, libraries and public institutions. No action on this resolution was taken by the Board.

2. The New Jersey Society offered a resolution with respect to delegates to the Peace Conference, and suggested that, since the Founder Societies were pressing for representation at this conference to advise on technical matters the National Society should also participate. In its discussions, the Board felt that, since the National Society is not a technical society, we should oppose any action along these lines. This resolution was passed.

3. A resolution was presented by the Minnesota Society with respect to the proposed bill, authorizing the employment of private engineers in federal projects, and urged the submission of the bill that was formally presented to the Society for action. Consideration of this bill is now in the hands of the various State Societies and the Secretary was instructed to canvass the State Societies for an expression of their opinion as to whether or not this bill should be pressed.

4. The Minnesota Society presented a resolution, calling upon the National Society to watch carefully any amendments that may open up the question of amending this act, the President of the National Society was authorized to take such action as may seem necessary to secure the exemption of professional engineers from the act. The resolution was approved, but it was pointed out that the likelihood of amending this act, which is in reality a bill of rights, seems quite remote. However, it was felt that the Fair Labor Standards Act, which exempts the legal and medical professions from any collective bargaining, might more readily be amended, or at least the definitions contained therein might be changed in such a manner as to exclude the professional engineers, the same

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Submitted as:

ITEMS OF GENERAL INTEREST

Perry T. Ford Appointed Director

PERRY T. FORD
Past President N.S.P.E.

Ohio Department of Highways

Columbus, Ohio, January 22—Perry T. Ford, of Columbus, today took office as director of the Ohio Department of Highways, the largest branch of state government.

Appointed by Gov. Frank J. Lausche on January 4, Mr. Ford becomes the 16th director of highways since the department was created in 1904. He succeeds Hal G. Sours, who was named director in 1940 when Maj. Gen. Robert S. Beightler assumed command of Ohio's 37th Division.

Particularly concerned with Ohio's gigantic postwar highway program and the manpower shortage in the department, Mr. Ford said, "I recognize the immensity and importance of the task ahead of me and I expect to proceed cautiously."

A veteran civil engineer, Mr. Ford's appointment has been widely and favorably received by the highway industry and engineering fraternities.

Mr. Ford, 56 years old, is a native of Rushmore, Putnam county. He was educated at Ohio Northern University at Ada and later received an honorary degree from the University of Dayton.

He served as division engineer in the State Highway Department during the administration of Gov. James M. Cox and was at one time engineer of Putnam county. He was chief engineer of the Pan American Engineering Company and was assigned to Cuba for eight months, supervising governmental construction work. He is a member of the Society of Professional Engineers of France making him one of the few Americans qualified to pursue his profession in France.

He has served as president of both the Ohio Society of Professional Engineers and the National Society of Professional Engineers. He has been assistant secretary of the State Professional Engineers and Surveyors' board, vice-president of the National Council of State Boards of Engineering Examiners, and is founder of Engineering Age, professional publication of the Ohio Society of Engineers.

He is married and has two children, a daughter, Mrs. Robert Sawyer, now a resident of Texas, and a son, Jack, of the United States Marines.

Congratulations and best wishes to Past President Ford of N.S.P.E.

In Memory of ROBERT HALL CRAIG

Penn. Society Adopts Resolution

Annual Meeting — Jan. 20, 1945

Time and tide wait for no man and in the passing of our fellow member, friend and colleague, *Robert Hall Craig,* we are again reminded that there is no philosophy in the coming of the Grim Reaper.

His going is a distinct loss to all of us and especially to those who knew and served with him intimately and were closely identified with him. His memory will live in the lives of those he has touched and the good that he has done can never be lost.

He lived in the conviction that faithfulness to a trust and obligation and friendliness in business, social and other of life's activities were abiding values. We knew him best as one who lived up to the ideals exemplified in these characteristics. His was an honorable career and he served with success in the positions he filled. He was loyal to his obligations, faithful in the performance of duty assigned, courteous and kind to all with whom he came in contact and served his fellow man in the spirit of the good and helpful neighbor.

As a citizen he contributed to the best interests and service of those of his community and State. As a member of the Pennsylvania Society of Professional Engineers he was a leader and discharged his duties and obligations as a sacred trust. He was past-president of the Pennsylvania Society of Professional Engineers, National Director of the Society, former Editor of The American Engineer, Trustee of the Pennsylvania State College, member of the State Civil Service Commission, Mason, Rotarian and Captain in the First World War. His interest in the work of the Society, his activities in community affairs, his outstanding ability in his chosen profession, make his death keenly felt by a wide circle of friends and associates. Such men this Society can ill afford to lose.

The Pennsylvania Society of Professional Engineers expresses both its sorrow in the passing of *Robert Hall Craig,* and its admiration for the active and fruitful life he lived. Therefore, be it resolved that this statement be made a part of the permanent records of the Society.

(*Prepared by Hubert E. Eicher*)

Comment On Editorial Policy-Making

By Frank W. Shelton, Jr.

It is desired to analyze and attempt to constructively criticize the editorial "Post War Proposals" appearing in the December,

1944, issue of The American Engineer, as that editorial presupposes to represent the policy and collective opinion of the membership of The National Society of Professional Engineers.

Your editorial raises two basic questions:

A—Shall this nation veer toward the communistic form of state or maintain its traditional capitalistic structure?

B—Shall The National Society establish a firm and definite policy of advocating one or the other of these forms of domestic political economy? If so, shall that policy conform to the desires of National Society officers and the American Engineer editorial staff, or, shall that policy represent the crosss-section opinion of the members?

It is my thought that the Society should take a definite stand; but, in view of the fundamental character of the issues, I believe a clear statement of proposed policy should be submitted to the membership for a vote before representatives of the Society assume one position or the other. This policy should be clearly, concisely and unequivocally stated.

Even though I agree with many of your observations isolated from the context, your editorial impressed me as being contradictory and as suggesting a centralized state-controlled domestic economy. My impression may not correspond with your beliefs. This indicates strongly why it behooves one stating policy to insulate such pronouncements on vital subjects against any possible misinterpretation. If I correctly interpreted your thoughts, then, more than ever, I must challenge your declarations of policy and your premises from which your conclusions were drawn.

In the first sentence you state, " . . . . there has been a pronounced tendency to discount both the need for and the practicability of Post War Construction as a means toward providing employment and stabilizing economic conditions after the conclusion of hostilities." You do not define the term "Post War Construction". Do you mean private or public construction? I have noted no apathy (at least in Ohio, Indiana and Michigan) among public officials or private businessmen in this regard; although I must admit, the latter are perplexed by the uncertainty of future governmental policies.

Next you say, "They (engineers) realize only too well that economic theories are again emerging as the sole means toward the end of general prosperity and welfare." But, while depreciating economic theories, you assert that " . . . . orthodox laissez faire economy, ... , led to the inevitable end of turmoil and suffering . . . ". That is using an economic theory as a fact. Then you offer as a fact the most debatable economic theory, to wit: " . . . . the answer to internal dissension and economic depression is universal employment, *regardless of how provided* (1) . . . ".

Becoming demogogical, you avow that those who might insist that the government cannot afford certain expenditures to insure employment would not " . . . have the temerity to suggest that the United States could not continue its war effort for any period that might be required for victory".

Oddly enough, the editorial attitude seems to be confident in state control but takes a gloomy, defeatist, can't-be-done attitude toward the ability of " .. . uncoordinated and individual private enterprises of the country to afford employment . . . ". Governmental policy, now more than ever before, sponsors competition by means of strict enforcement of anti-trust statutes. Without disagreeing with this policy, it is only fair to point out that these statutory inhibitions are largely responsible for private industry not being "organized, controlled or even directed to function as a unit or in uniform endeavor."

Doesn't the reproof of private industry for its "perspectives, aspirations and obligations", and the presumption that "government will have to assume responsibility just as it does for the conduct of the war", appear more totalitarian than American, more like crack-pot economic theorizing than like aggressive, foresighted engineering ingenuity?

You declare that "when widespread employment is a fait accompli, government can and should relax and reduce to a minimum all endeavors that can be provided through non-government sources, as well as those which can proceed strictly in proportion to public needs." When can employment be more widespread than now? When should workers be in better position to maintain themselves for a period between jobs than immediately following the war? When will we have a greater domestic or foreign market for consumer goods and heavy construction, such as highways (as opposed to relief, developmental or emergency construction)? When, if extensive governmental direction, expenditures, control and pump-priming construction are needed in the immediate post-war period, will this country ever reach an economic plane where government can (or rather will) and should relax and reduce to minimum?

I believe that Engineers, together with other scientists and professional men, should lead the way by the use of their special talents to a tomorrow of greater freedom from totalitarian control; rather than acting as adding machines and instrumentalities in the hands of those whose selfish or unsound political-economy theories revolve around a semi-serfdom created by extensive control of domestic economy by centralized agencies.

(1) *Italics are writer's.*

Why Did You Join?

By William Crepa

To the Editor of the American Engineer
Dear Sir

In the January 1945 issue of the American Engineer, there appeared an article by "Berry E. Brevik" in which he asks "Why did you join"?

Convinced that engineers should have an organization which works for the advancement of their professional and economic interests.

I joined the professional engineers movement in order to work and to help those who are striving to bring about progress in the profession and to raise the standards of the engineer to a stage comparable with that of other recognized professions.

I joined because I believe that the engineer, no matter where he is employed, needs an organization to look after his professional interests. Alone he gets nowhere, while with the united effort of all his advancement is assured.

I joined because I felt that the leaders of the movement are men of integrity, vision and honesty of purpose. I feel proud of an association with those men under whose inspiring leadership the profession will, and must advance.

I joined because I believe that only through the effort of such an organization as the Professional Engineering Society will it be possible to establish fair compensation standards for professional engineers in civil service, in corporation employment and in private practice. I believe that the economic welfare of the engineer should be placed first, if the membership of the society is to be increased. The engineer needs the satisfaction of a decent remuneration to develop his inventive, creative and productive capacities, and to keep professionally alert. Those engineers who are persistently pressing the need of service to the public, should remember that the public enjoys the benefits of the advances and improvements made by engineering effort, and it is but fair that the public assume responsibility for fair compensation to the engineer.

Finally, I joined because it is my firm belief that a dignified organization composed of professional engineers can represent the engineer better than any other agency. It is also my belief that engineers who are in control of personnel should practice some of the fundamental principles of humanity. They should be tolerant of and cooperative with their fellow man.

Legislation

Public Works Programs

Legislation appropriating adequate funds for the preparation of plans and the coordinating of federal programs is lagging in Congress. There are measures pending but opposition is seeking to curtail monies and to maintain divers agency controls in place of a single departmental directive. Highways, Housing and other forms of work to be performed by States and Cities with federal aid are included in the legislation presently being debated.

Fragments from

STATE & SOCIETY ACTIVITIES

GEORGIA

Reports On Atlanta Meeting

The American Engineer acknowledges with appreciation the following submission from Carl W. Evans, First Vice President and Chairman of the Public Relations and Publicity Committee of the Georgia Society:

With 160 of its 237 members present, the Georgia Society of Professional Engineers held its first annual meeting in Atlanta, in January. Highlights of the meeting were an address by Blake R. Van Leer, President, Georgia School of Technology, and the installation of new officers.

Under the subject "Engineering in the Postwar Era," Dr. Van Leer discussed a considerable number of the specific opportunities that await development in the postwar period in the fields of aeronautics, architecture, ceramics, and industrial management, as well as civil, electrical, mechanical, textile, and public health engineering.

The new officers selected to serve the organization during 1945 represent a wide range of professional engineering activities. They include the following: President, Stephen C. Hale, Chief Engineer, Fulton Bag and Cotton Mills, Atlanta; First Vice-President, Carl W. Evans, Editor, Electrical South Magazine, Atlanta; Second Vice-President, Albion M. Gruber, Assistant Engineer, Bridges and Buildings, Central of Georgia Railway, Savannah; Treasurer, John A. Dodd, Manufacturers Representative, Atlanta; and Secretary, Dr. Ray L. Sweigert, Director of General Engineering and Professor of Mechanical Engineering, Georgia School of Technology, Atlanta.

The new board of directors includes: Charles E. Layton, City Manager, City of Thomasville; R. P. Pool, Electrical Engineer, Tubize Rayon Corp., Rome; Carl H. Schofield, Sales and Production Engineer, Taylor Iron Works and Supply Co., Macon; Michael J. Blew, Lt. Col., Sn. C., Atlanta; Cherry L. Emerson, Vice-President and Chief Engineer, Robert & Co., Inc., Atlanta; and D. P. Savant, Dean of Engineering, Georgia School of Technology, Atlanta. The Georgia Society's national representative is Roy S. King, Head of Mechanical Engineering Dept., Georgia School of Technology, Atlanta.

An interesting feature of the annual meeting was the distribution of the Society's first Year Book, a 24-page folder attractively bound in green covers. The year book included a statement of the organization and functions, the objectives of the Society, historical outline of activities, Constitution and By-Laws, member ship roster both alphabetically and by congressional districts, and a map showing geographic distribution of membership.

Considerable publicity has already been given the 12 objectives of the Society which form the basis of present activities:

1. To cooperate with and assist the Georgia State Board of Registration for Professional Engineers and Surveyors.
2. To protect the public and the profession against the unlawful use of the rtem "Engineer" and to promote strict enforcement of the Registration Act.
3. To cooperate with all recognized technical and engineering societies in matters affecting professional engineering practice.
4. To assist engineering colleges in the maintenance and strengthening of standards of engineering education.
5. To cooperate with other professions for the advancement of ethical practices.
6. To encourage favorable legislation and to oppose unfavorable legislation as pertaining to engineers and the general welfare.
7. To promote the appointment of representative, professional engineers on public committees, civic boards, and commissions.
8. To secure full utilization of professional engineering services by government and industry.
9. To obtain public recognition of the merits and accomplishments of the Professional Engineer.
10. To establish standards of equitable compensation for engineering services.
11. To promote the interests of the "Engineer-in-training" and to guide him in his efforts to attain professional status.
12. To participate in and promote the development of industry and the conservation of natural and human resources in Georgia.

ILLINOIS

Reports on Annual Meeting

The following report is from the pen of Dr. Max Suter and has been received through the courtesy of the Editor of the Illinois Engineer

The Illinois Society of Engineers held its Sixtieth Annual Meeting January 25 and 26 at the Hotel Sherman in Chicago.

Due to war-time conditions, the program was again shortened to a day and a half duration. This allowed every technical section only one paper, but left plenty of time for an interesting and important business session.

The evening buffet supper was high lighted by an address by President Harry E. Nold of the National Society of Professional Engineers on the meaning of professionalism.

The business session was presided over by President J. H. Morgan.

The new officers elected for 1945-46 are: President—C. J. McLean, Dixon; Vice-President—G. H. Anderson, Herrin; Directors—J. M. Whelan, Joliet, to 1945; W. B. Worsham, Springfield, to 1947. Past President—J. H. Morgan. Secretary-Treasurer—H. E. Babbit. Chapter Representatives are: J. E. Weinel, Madison—St. Clair, 1947; L. C. Domke, Lake Country, 1945; C. C. Wood Capital, 1947; H. F. Walder, Rock River, 1946; G. E. Ekblaw Champaign Country, 1946; E. E. Cooper, Central Illinois, 1946; O. M. Andres, Egyptian, 1945; C. B. Garnsey, Joliet, 1945; F. H. Renz, Illinois Valley, 1946; D. M. Campbell, Chicago, 1946. The Secretary is appointed by the Board itself. The Board also appointed as Editor of the Illinois Engineer, W. A. Oliver, Urbana; as Representitive in the N.S.P.E. Alex Van Praag, Jr., Decatur

The Illinois Award was presented to S. M. Wood of Lake Bluff who obtained it for the third time, a record that can hardly be surpassed by anyone. The Illinois Award is won by the mem ber who presents the best paper at the previous annual meeting or in the Illinois Engineer

In 1943 the Illinois Society adopted a new constitution, to go into effect one year after the Professional Engineering Act becomes effective. As this act was declared unconstitutional by the Illinois Supreme Court, it was decided that the Society constitution of 1939 is the one under which the Society is operating.

The report of the representative to the N.S.P.E. was made by Alex Van Praag, Jr. and the report of the representative to the Illinois Engineering Council by L. M. Spurling.

The report of the Committee on Fees and Salaries was present in outline by H. A. Riedesel. The full report will be published in the February number of the Illinois Engineer and will then be submitted to a letter ballot for adoption or rejection by

the whole membership.

The Illinois Society of Engineers has been for many years principally a technical society. However, during the last few years professional questions have gained more and more in importance to the engineering profession with the devlopment of a professional concience.

The Illinois Society of Engineers was the natural outlet for promoting activities along this line in Illinois, as this Society embraces engineers of all types, uniting undertakings toward fostering of professional activities have been the efforts made to obtain a registration law for engineers and the formulation of standards for fees and salaries. Many more similar problems are coming up in the near future, like the effects of the National Labor Relation Act on Professional Engineers and the effects of many other national, state and local laws on engineering.

Foreseeing such a trend in the increase of the importance of problems of this nature and recognizing the need to have an organization to meet them, President Morgan worked all through 1944 to convince the members of the Illinois Society of Engineers that their main aim and activity should be the promotion of professional standing. At the business meeting Mr. Morgan explained these problems again, discussing in detail the expansion of services which the Society can give. He explained that full benefit could only be obtained with the availability of a specially paid secretary, but that the value gained would be worth several times a necessary increase in dues.

In order that the full membership of the Illinois Society of Engineers can decide on the fundamental policies, the following questions will be submitted to a letter ballot:

1. Shall the Illinois Society become a professional engineering society, dealing with professional, ethical, social, economic and public affairs connected with or affecting the profession of engineers?

2. Shall the Illinois Society of Engineers continue its affiliation with the National Society of Professional Engineers with the attendant requirements that its corporate members who are eligible shall become members of the National Society of Professional Engineers and its future members shall be eligible for membership in the N.P.S.E.

3. Shall the Illinois Society of Engineers employ an administrative secretary who eventually will be expected to devote his full time to the administration of society affairs.

The results of this balloting will have a fundamental influence on the future of the Society.

INDIANA

President Appeals

In his initial news letter for 1945, President Cameron says

Let us start 1945 auspiciously. We can do this by paying our dues at once and with that out of the way and off our minds, we should follow up the shot and make it one of our most important New Year's resolutions to attend the monthly meetings. Arrangements have been made with the management of the Claypool Hotel to use Parlor B, on the mezzanine floor, until further notice. Seats will be provided for fifty and additional chairs will be available to avoid hanging out the S.R.C. sign. Centrally located, the Claypool can be conveniently reached by street car, just in case your A-14 coupons are scarce.

Larry Condrey is doing a swell job editing the I.P.E. It requires time—a lot of it—to get this sheet out. Larry is busy in his duties as an engineer and to relieve him of the great worry and concern over a dead line, so the paper will reach you prior to a meeting, we have decided to mail a postal card to the active members prior to the third Thursday of each month. That's the date of the meeting, in case you forgot. The card will announce the name of the speaker and his subject.

The General Assembly is in session. Additional legislation for professional engineers should be enacted. Do you want a stronger registration law? Do you favor an "engineer-in-training" amend ment? Are you interested in a social security law which will include state employers who are registered engineers?

These pertinent questions about subjects and problems in volving the welfare of our members are somewhat controversial although I can see only one side. The answer to each question posed above should be "yes."

These changes cannot come about automatically. Work, action, assistance and cooperation are necessary. If you are called upon for aid, get in and "pitch.

The program will be discussed and action taken at the January and February meetings. It scarcely behooves any non-attending member to challenge whatever action may be decided upon at the meetings.

May 1945 keep you prosperous.

KENTUCKY

University Note

The Board of Trustees of the University of Louisville has established a non-profit corporation, The University of Louisville—Institute of Industrial Research.

The purpose of the Institute is to engage in engineering and scientific research for industrial and private clients on a contract basis.

The Institute is the outgrowth of the Division of Industrial Research in the Speed Scientific School, which during the past few years has carried on limited contract research for industry.

The new organization, in addition to employment of a small permanent technical staff from different scientific and technical fields, will depend for its assistance in supervision on selected staff members of the engineering and scientific faculty. The research work will be carried on by graduate fellows.

The Institute will be housed in a new research building, and in addition, will use facilities of the Engineering Laboratories.

The Officers of the new Institute are: Chairman of the Board of Managers, Dr. E. W. Jacobsen, President University of Louisville; President, F. L. Wilkinson, Jr., Dean, Speed Scientific School; Director and Vice-President, Dr. R. C. Ernst, Professor Chemical Engineering.

MINNESOTA

Culled From News Letter

The following items have been extracted from the News Letter of the Minnesota Association of Professional Engineers:

Plans For Radio Education

As part of our educational program, arrangements are being discussed between M.A.P.E. and radio station WLB of the University of Minnesota for a weekly broadcast. Suggestions include telling in every-day language the story behind some of our outstanding Minnesota engineering accomplishments. A joint committee will work out details and we'll let you know of developments so that you may organize your own listening audience.

Behind The Scenes With Registration Changes

While many of our members relaxed during the holiday season, others worked day and night putting the finishing touches on the proposed changes to our State Registration Law. Starting the day after Christmas, President Stolte, Ted Thompson, Harold Chard and others conferred with legal counsel, prepared reports and listened to others, with the result that every possible loophole has been tightened. It seemed advisable to secure constitutional legal advice after the Illinois Act had been declared unconstitutional for being indefinite. We didn't want that to happen in Minnesota so we have incorporated a new definition of the practice of architecture and engineering. Other changes have been primarily technical and legal to make the law less vulnerable in the eyes of the court if attacked.

New Names On Our Roster

A hearty welcome to our new members:

A. Glorvigen, Highway Engineer, Otter Tail Co., Fergus Falls; John H. Merriman, Jr., Field Maintenance Engineer, Northern States Power Co., Minneapolis; Len E. Rollins, Chief Mechanical Engineer, Standard-Anderson-Sterling Co., Minneapolis; Wen Ping Pan, Mining Engineer, Oliver Iron Mining Co., Hibbing; R. K.

Redin, Civil Engineer II, Minnesota Highway Department, St. Paul; Edward Braddock, Project Planner, City Planning Commission, Minneapolis.

We are happy to report that we had more new members this year—71—than at any other period in our history, with the exception of the original organization drive. Our total now is 439.

Civil Service Activities

The Civil Service Committee is keeping in touch with the Public Administration Service which has been making a survey of State Civil Service classifications and salary ranges, preparatory to making a recommendation to the Civil Service Board for a sound pay plan. A copy of M.A.P.E.'s salary schedule, along with charts showing comparative salary scales of various engineering organizations have been given to the Public Administration Service. Their attention has been called to the wide differences between engineering salaries recommended and the schedule of salaries arrived at by M.A.P.E. Dr. Price represented M.A.P.E. at a public hearing of the Civil Service Board and the Civil Service Committee.

NEW JERSEY

New Officers And Directors

The officers for the New Jersey Society for 1945 are

President, Stephen G. Szabo, 813 Lawrenceville Road, Trenton
Vice President, Daniel M. Kramer, 107 S. Girard St., Woodbury
Vice President, Alonzo L. Jones, 17 Glen Road, West Orange
Sec-Treasurer, Frederick D. Braun, 16, N. Hillside Ave. Ventnor City
NSPE Director, Hugh C. Clarke, City Hall, Jersey City
NSPE Director, C. George Krueger, 85 Van Reypen St., Jersey City
NSPE Alt. Director, Earl L. Daily, 451 Delaware St., Woodbury.

On January 15, 1945 an Executive Office of the Society was opened in the Wallach Building, 86 E. State Street, Trenton 8 N. J. At the present time the office is manned by our Miss Ruth Wenzel acting as office secretary and assistant to the Managing Director of our Society when he has been appointed. All of our activities will center around this Executive Office when the records have been transferred. You will be notified of this change at that time.

NEW YORK

Society Legislative Bulletin

The first and second issues of the Legislative Bulletin published by the New York State Society are splendid examples of the value of this service. They are well worth emulation by all State Societies.

Sample pages from the first issue of some thirty and the second of twelve pages are noted as illustrations.

New York State Society Of Professional Engineers, Inc.

Legislative Office
36 *State Street*
Albany, N.Y.

Society Headquarters
1941 *Grand Central Terminal Building*
New York 17, *N.Y.*

LEGISLATIVE BULLETIN

Robert C. Wheeler, Chairman Committee on Legislation

Clarence W. Post President

The technical problems of the Engineer are divergent, but the professional problems are alike. We are organized on the principle of uniting all engineers as members of one profession.

Volume 8 Bulletin No. 1

The 1945 New York State Legislature convened at 12 noon on January 3, 1945.

In the Senate, Hon. Benjamin F. Feinberg of Plattsburgh was again chosen President Pro Tem and Majority (Republican) Floor Leader, with Hon. Elmer F. Quinn of New York City Minority (Dem.) Floor Leader. William S. King of Old Chatham continues as Clerk.

In the Assembly, Hon. Oswald D. Heck (Republican) of Schenectady continues as Speaker, with Hon. Irving M. Ives of Norwich again Majority (Republican) Floor Leader and Hon. Irwin Steingut of Brooklyn continuing as Minority (Democratic) Floor Leader. Ansley B. Borkowski of Buffalo will again be Clerk of the Assembly.

Governor Dewey read his Message to the Legislature in Joint session, and both houses adjourned until Monday, January 8th.

The Governor's Message included the following recommendations:

Finances

The Governor recommended that this year's surplus of approximately $150 million be transferred to the Post-War Reconstruction Fund, bringing the amount in that fund to approximately $310 million.

Post-War Building Program

$800 million highway construction program, as well as a program for buildings and projects other than for the Dept. of Public Works totaling more than $100 million; also increased State subsidies for low-cost housing, were included in the Governor's recommendations for a post-war building program.

Business and Employment

Governor Dewey recommended that legislation be enacted to establish the responsibilities of the Department of Commerce in the field of aviation, in an effort to promote the development of aviation in the State.

Labor

Wider workmen's compensation average; consideration of a system granting different rates of unemployment insurance contributions to different types of employers in order to reward the maintenance of stable employment levels; increase in salary from $7,500 to $10,000 per annum for members of State Labor Relations Board.

Taxation

Continuation of the present 25% reduction in State income taxes

Education

Suggested increases in State aid for education.

Agriculture

Survey of the food production situation in the State, with the objectives of assisting farmers and supplying the people of the State with the best possible food at reasonable prices.

St. Lawrence Power Project

The Governor recommended that the State continue to assert its interest in the St. Lawrence development and stated that it was his conviction that if the Federal Government does not proceed, the State itself should undertake to complete the project in co-operation with the Dominion of Canada and the Proince of Ontario.

State Employees

Pay increases are recommended for all State employees.

Legislature

Higher pay for members of the Legislature is recommended, with leaders to receive as much as $12,000 a year.

Commercial Rents

Legislation to curb commercial rent "gouging" in New York City

Delinquency and Crime

Adequate youth service agency to prevent juvenile delinquency and crime

Discrimination

More stringent anti-discrimination laws.

Soldier Vote

Broadening of the Soldier Vote Law to permit voting by members of the Merchant Marine, Red Cross and other similar authorized agencies.

The following bills are reported for their general interest, and it will be noted that many of them carry out recommendations made by the Governor

Sen. Int. No. 1 - Feinberg Assem. Int. No. 1 - Stephens
Transfers to post-war reconstruction fund cash surplus of general fund in state treasury remaining at expiration of fiscal year ending Mar. 31, 1945. . . Finance Committee

Sen. Int. No. 2 - W.J. Mahoney Assem. Int. No. 66 - Mailler
Continues to Feb. 15, 1946 commission created to study medical care and increases from 10 to 12 members appointed by governor, 6 instead of 4 to be licensed physicians. . . Finance Committee.

Sen. Int. No. 3 - Condon Assem. Int. No. 62 - Catenaccio
Extends workmen's compensation coverage to domestic workers, other than those employed on farms, employed by same employer for more than 48 hours per week in cities and villages of 40,000 or more: failure to secure compensation shall not be a misdemeanor. . . Labor Committee.

Sen. Int. No. 4 - Oliver Assem. Int. No. 79 - Ives
Creates in executive dept., divisions of commerce and industry, of state publicity and of economic development; authorizes commerce commissioner to advise and cooperate with municipa agencies, other state depts. and federal agencies for development of air routes, airports and air policies . . . Finance Committee.

Sen. Int. No. 20 - Burney (No Assembly bill)
Provides municipal corporation furnishing public utility service need not decrease its rates and charges on order of public service commission unless order is issued upon notice and after hearing instituted by not less than 25 of active consumers residing in territory in which rates apply . . . Cities Committee.

Sen. Int. No. 24 - Coudert Assem. Int. No. 55 - Mitchell
Permits N.Y. City to exempt from local taxation for 10 year period, increase in assessed valuation resulting from alterations and improvements to existing buildings which are substandard and insanitary if construction is started after Jan. 1, 1945 and completed before Dec. 31, 1946; buildings where rent exceed $8 a month per room after improvement are excepted . . . Taxation Committee.

Sen. Int. No. 40 - Moritt (No Assembly bill)
Provides annual pay for civil service employees in one of the services or occupational groups in Sec. 40, Civil Service Law shall not be less than $1500 commencing with fiscal year beginning Apr. 1, 1945. . . Finance Committee.

Volume 8 Bulletin No. 2

State Legislation

As of February 1st 797 bills have been introduced in the Assembly and 676 in the Senate, a total of 1473. Of these, 5 have already become law, among them the New York City commercial rent control measure, continuation of the medical care commission, and transfer to the post-war reconstruction fund of the cash surplus remaining in the general fund of the State treasury at the close of the current fiscal year.

Two bills which the Society has opposed for the past several years have been introduced again this year. They are as follows:

1. (No Senate bill) Assem. Int. No. 578 - Emma
Defines employee for Labor Law purposes to include any person working for another for hire instead of only mechanic, workingman or laborer . . . Labor Committee.

2. Sen. Int. No. 596 - Parisi Assem. Int. No. 697 - Crews
Defines employee for Labor Law purposes to include individual performing architectural, technical engineering and drafting services for his employer. . . Labor Committee.

The Society has opposed these bills because it was felt that they were incompatible with the professional status which has been granted to the engineers, inasmuch as engineers with professional licenses would be included as well as subordinate workers and those who do not yet have licenses but who are in line for them. The first bill would of course affect other professions as well as engineering. Bills similar to these have been killed in committee for the past seven years.

It will be recalled that toward the close of 1944 session of the Legislature there was considerable feeling evinced to the effect that legislative reforms were necessary, one of the chief causes of complaint being the alleged arbitrary use of power by the Assembly Rules Committee during the latter part of the session when all bills are referred to that committee. As a result of this criticism, a Joint Legislative Committee to Inquire Into and Study Legislative Methods Practices, Procedure and Expenditures, was appointed with Senator Floyd E. Anderson as Chairman.

Some suggestions of this committee have already been carried out, but the question of any major changes in procedure will be the subject of a report which the committee is due to make by March 1, 1945. However, it is felt in informed circles that the New York State system is equal, if not superior, to those in effect in other states as well as in the Federal Government.

The following bills are reported for their general interest:

Sen. Int. No. 423 - Halpern Assem. Int. No. 259 - Preller
Extends unemployment insurance provisions on Jan 1, 1946 to employers of one or more persons except for personal and domestic service, coverage for which remains at 4 or more. . Labor Committee.

(No Senate bill) Assem. Int. No. 265 - Stephens
Amends, reduces, interchanges or repeals certain appropriations and unexpended balances made by laws of 1944 for personal service and maintenance and operation of legislature, the difference between the old and new schedules showing a saving of $100,484.63. (Note: The above bill is the first to be enacted into law this year, having become LAW, Chapter 1 of 1945.)

Sen. Int. No. 210 - Friedman Assem. Int. No. 307 - Levine
Creates in executive dept. a youth service division with director and advisory council of 10 members appointed by governor to organize local councils in various communities for preventing delinquency and crime by promotion of service for children and young people, and by assisting schools and courts with programs; $500,000 is appropriated. . . Finance Committee.

Sen. Int. No. 214 - Pack (No Assembly bill)
Fixes basic rent for commercial real property in N.Y. City, as rent paid by tenant before and in case of vacancy, by first tenant after effective date of act and until July 1, 1946, prohibits summary proceedings for recovery of property or rent in excess of basic rent; exception is made for landlord seeking to demolish building or to use premises himself. . . Finance Committee.

Sen. Int. No. 227 - Greenberg Assem. Int. No. 423 - Farbstein
Provides for submission to people at general election in 1945 proposition that there shall not be outstanding contracts for periodic subsidies in housing projects, requiring payments exceeding $9,000,000 instead of $5,000,000 . . . Cities Committee.

Sen. Int. No. 228 - Greenberg Assem. Int. No. 422 - Farbstein
Authorizes state debt of and appropriates $115,000,000 for public housing for persons of low income, proceeds from sale of bonds being appropriated to housing division in executive dept. for loans to any city, town, village or authority. . . Finance Committee.

Sen. Int. No. 232 - Warner Assem. Int. No. 296 - Hollowell
Continues to Mar. 31, 1946 flood control commission and appropriates $30,000. . . Finance Committee

Sen. Int. No. 262 - Friedman (No Assembly bill)
Suspends application of formula for apportionment of public moneys for school districts and cities for 1945-1946 school year and allows each district and city same amount of state aid as apportioned for 1940. . . Education Committee

STANDING COMMITTEES OF THE SENATE FOR 1945
(First named following Committee is Chairman)

Affairs Of Cities: Senators Desmond (Chairman), W. J. Mahoney, James, Anderson, Oliver, Pierce, McGovern, Campbell Wostowiak, Greenberg, Cullen, Corrou, Ex-Officio, Feinberg, Quinn.

Affairs of The City of New York: Senators Fino (Chairman) Coudert, Wicks, Condon, Halpern, DiCostanzo, Bainbridge, Burney, Erwin, Hammer, Brown, McGovern, Joseph, Novod, Rudd

Affairs Of Villages: Senators Burney (Chairman), Graves, Condon, Young, Seelye, Bennett, Greenberg, Downey, Corrou.

Agriculture: Senators Graves (Chairman), Young, Seelye, Mitchell, Burney, Bontecou, Pierce, Anderson, Hammond, Oliver, Erwin, Hults, Wojtkowiak, Crawford, Corrou.

Aviation: Senators Oliver (Chairman), Burney, Anderson, Bainbridge, Brown, Campbell, Hammer, Hults, F. J. Mahoney, Downey, Corrou.

Banks: Senators Williamson (Chairman), Bewley, W. J. Mahoney, Young, Mitchell, Oliver, Anderson, Coudert, McGovern, Parisi, Fino, Crawford, Corcoran, Downey, Greenberg.

Civil Service: Senators Erwin (Chairman), Halpern, Desmond, W. J. Mahoney, Hammond, Hults, McGovern, Campbell, Kirnan, F. J. Mahoney, Moritt, Cullen.

Claims: Senators Pierce, (Chairman), Parisi, Fino, Hults, Campbell, Freidman, Rosenblatt.

Codes: Senators Young, (Chairman), W. J. Mahoney, Williamson, Warner, DiCostanzo, Pierce, Coudert, Bennett, Downey, Rudd, Dollinger, Friedman.

Commerce and Navigation: Senators Bainbridge (Chairman) Mitchell, Bewley Janes, Erwin, Parisi, Rosenblatt, Cullen, Corrou

Conservation: Senators Stokes (Chairman), Graves, Young, Griffith, Hammond, Duryea, Bontecou, Anderson, Bennett, McGovern, F. J. Mahoney, Byrne, Rosenblatt, Dollinger.

Corporations: Senators McGovern (Chairman), Williamson, W. J. Mahoney, Coudert, Erwin, Hammer, Fino, Joseph, Downey, Moritt.

Excise: Senators Bontecou (Chairman), Stokes, Wicks, W. J Mahoney, Bewley, Condon, Hammond, Halpern, Oliver, Bainbridge, Parisi, Crawford, Wojtkowiak, Kirnan, Dollinger.

Finance: Senators Wicks (Chairman), Desmond, Stokes, Warner, Bewley, Condon, Young, Janes, Coudert, W. J. Mahoney, Griffith, Mitchell, Halpern, Seelye, Duryea, Bontecou, Williamson, Anderson, DiCostanzo, Crawford, Wojtkowiak, Joseph, Pack, Falk, Kirnan; Ex-Officio, Feinberg, Quinn.

General Laws: Senators DiCostanzo (Chairman), Mitchell, Pierce, Anderson, McGovern, Parisi, Novod, Rosenblatt, Moritt.

Highways and Parkways: Senators Seelye (Chairman), Duryea, Warner, Stokes, W. J. Mahoney, Williamson, Graves, Griffith, Bontecou, Janes, Mitchell, Anderson, Bennett, Hammer, Conrad Byrne, Corrou; Ex-officio, Feinberg, Quinn.

Insurance: Senators W. J. Mahoney (Chairman), Warner, Williamson, Condon, Coudert, Mitchell, Bainbridge, Anderson, Erwin, Bennett, Hammer, Greenberg, Byrne, Dollinger, Friedman.

Internal Affairs: Senators Griffith (Chairman), Warner, Stokes Seelye, Young, Mitchell, Burney, Duryea, Bontecou, Oliver, Bainbridge, Hults, Wojtkowiak, Corcoran, Byrne, Corrou; Ex-officio Feinberg, Quinn.

Judiciary: Senators Warner (Chairman), Williamson, Coudert, Young, Burney, W. J. Mahoney, Anderson, Pierce, Erwin, DiCostanzo, Joseph, Pack, Falk, F. J. Mahoney, Greenberg; Ex-officio, Feinberg, Quinn.

Labor and Industry: Senators Condon (Chairman), Wicks, Graves, Bewley, DiCostanzo, Duryea, Campbell, Kirnan, Downey, Cullen.

Military Affairs: Senators Campbell (Chairman), Desmond, Janes, Halpern, Pierce, Brown, Corcoran, Friedman, Novod.

Mortgages and Real Estate: Senators Janes (Chairman), Desmond, Williamson, Hammond, Condon, Seelye, Halpern, Erwin, McGovern, Hammer, Hults, Brown, Joseph, Pack, F. J. Mahoney, Rudd.

Motor Transportation and Traffic Regulation: Senators Anderson (Chairman), Bewley, Stokes, Seelye, Halpern, Hults, Corcoran, Moritt, Cullen.

National Defense: Senators Hammond (Chairman), Wicks, Desmond, Warner, W. J. Mahoney, Janes, Seelye, Mitchell, Bewley, Erwin, Bennett, Fino, Brown, Hammer, Campbell, Joseph, Pack, Downey, Wojtkowiak, Conrad, Rudd, Novod, Cullen, Byrne; Ex-officio, Feinberg, Quinn.

Penal Institutions: Senators Hults (Chairman), Duryea, Hammond, Griffith, Brown, Fino, Corcoran, Rudd, Rosenblatt.

Pensions: Senators Duryea (Chairman), Seelye, Condon, Janes, DiConstanzo, Stokes, Erwin, Bennett, Dollinger, Novod, Moritt, Conrad.

Printed and Engrossed Bills: Senators Brown (Chairman), Halpern, Parisi, Hults, Conrad, Rudd.

Public Education: Senators Coudert (Chairman), Young, Graves, Desmond, Janes, Griffith, Mitchell, Hammond, Duryea, Oliver, Greenberg, Corcoran, Pack, Novod; ex-officio, Feinberg, Quinn.

Public Health: Senators Hammer (Chairman), Desmond, Condon, Griffith, DiCostanzo, Brown, Corcoran, Dollinger, Rosenblatt.

Public Institutions: Senators Halpern (Chairman), Stokes, Bontecou, Bainbridge, Duryea, Fino, McGovern, Parisi, Falk, F. J. Mahoney, Friedman.

Public Printing and Revision: Senators Parisi (Chairman), Bainbridge, DiCostanzo, Campbell, Fino, Hammer, Rosenblatt, Moritt, Conrad.

Public Relief and Welfare: Senators Bennett (Chairman), Wicks, Graves, Condon, Bewley, DiCostanzo, Erwin, Campbell, Kirnan, Friedman, Novod, Dollinger.

Public Service: Senators Mitchell (Chairman), Wicks, Desmond, Warner, Burney, Bainbridge, Pierce, Brown, Kirnan, Falk, Conrad; Ex-officio, Feinberg, Quinn.

Rules: Senators Feinberg (Chairman), Wicks, Williamson, Warner, Quinn.

Taxation and Retrenchment: Senators Bewley (Chairman), Seelye, Hammond, Burney, Bontecou, Oliver, Crawford, Conrad, Byrne.

New Committees: Newly created committees are: Highways and Parkways; Public Institutions; Corporations: Claims.

Albany

News of Men In Service

The Albany Chapter News Bulletin advises that

Many former associates and friends of Brig. General Thomas F. Farrell, previously Chief Engineer in the State Department of Public Works, now with Uncle Sam in India, were fortunate to meet him on his short leave in this country. General Farrell has served 14 months in the India-Burma theatre as commanding general of construction and is again enroute to parts unknown.

Another Professional Engineer in the news is our own Chapter member Lt. Col. Peter F. Gaynor, Jr., of 704 Western Avenue. "Pete" has served in various capacities in our Chapter and he was recently awarded the Bronze Star medal for meritorious service by Brig. Gen. White somewhere on the Western Front.

Remember Saul D. Harvith of 418 Hudson Avenue and with his "business address" in Year Book at Newark Air Base? He answered his post card invitation to our October meeting with a friendly note censored *India* that it was "a little too far to come and arrived too late to attend"

Elects New Members

The following are new members: Peter Lamb, Employed in D.P.W.; Russell E. Taylor, Employed in D.P.W.; Robert C. Georger, Employed in State Traffic Commission.

Chairman Wilbur A. Osborne and his Membership Committee are to be congratulated on their efforts to increase the membership of Albany Chapter. There are hundreds of licensed Professional Engineers in this area who are eligible to join—Help the Committee reach their goal—*Sign Up A Friend.*

Broome Area

Wins Membership Prize

The notice for the February Meeting of the Chapter contains the following item

The State Society Membership Drive for the period of October 1, 1944 to January 1, 1945 was won easily by Broome Area Chapter —*"other Chapters also ran"*. Under the able leadership of our President Bill McFarland and Russ Geib, Membership Chairman; with the help and cooperation of every last one of the members, we have won the first contest for the State Presidents' Official Gavel.

This Gavel is made from wood from a very historical building

on Staten Island and presented to the State Society by The Richmond Chapter. The Gavel Stand will have a silver plate with our Chapter name engraved in recognition of our efforts. This Gavel and Stand will remain with our Chapter for our use, until the winner of the next Membership Contest is announced. (Of course this Gavel will also be used at all State Society Meetings by the State President.)

During the Contest we increased our membership in good standing by 21. (Approximately 35% increase).

Erie Chapter was second with 15% and Westchester Chapter was third with 14% increase.

Upstate Chapters increased their membership approximately 10% and downstate Chapters 2.8%

The State Society increased its membership by 112 or approximately 6%, which is quite gratifying.

If all the Chapters had done as well as Broome, we would have the largest State Society and could afford a paid Secretary without any increase in dues.

L. P. Fries

Erie County Chapter

The following have been taken from the minutes of the last meeting as furnished by Secretary Eldridge.

The President announced the resignation of Albert B. Cole due to retirement from business and departure from the city. The resignation of Bert L. Beier was also announced, he having been promoted to Division Engineer for the D.L. & W.R.R. at Scranton, Pa.

President Landers read a letter from State President Clarence W. Post regarding the functioning of chapter committees on the Investigation of Candidates for License. Committee chairman Nunan answered stating that our chapter has responded in all cases referred to it. He expressed the view that perhaps better results could be obtained if inquiries of this nature were referred directly to the committee chairman. The secretary was asked to write a letter to the State President to that effect.

President Landers then introduced a guest of the evening, Mr. Raymond P. Conors, New York State Division Manager of the Colonial Radio Corporation, who was sponsoring the speaker of the evening.

There was presented to the meeting an advertisement by the Modernistic Engineering Co. of Buffalo, N. Y. The matter was referred to Mike MacDonald, Chairman of the Ethics and Practice Committee. Mr. Landers expressed the opinion there was some confusion regarding the state law. Mr. Nunan replied that at the fall meeting of the State Society, Arthur Sheridan had discoursed very ably on the subject. The secretary was asked to request a copy of that talk.

The discussions on subjects of our society contained in various communications to President Landers were good, clear and concise. There is a wide range of opinions among our chapter members relative to the degrees of importance of the Local Chapter, the State Society, and the National Society. Under the present set up the Local Chapter must be the principal part. If the State Society were to employ a full time executive secretary then the State uni would be the forceful part of the society. For purposes of federal legislation and of extending the standards of the profession to other states and territories the National Society is necessary. To facilitate the inter-state work of engineers the National Society has a heavy task.

Elwin Speyer has been appointed Chief Engineer of the Buffalo Grade Crossing and Terminal Commission. We congratulate the people of Buffalo. We also extend congratulations to Elwin.

Bert Tallamy has been appointed Deputy State Superintendent of Public Works. His headquarters will be at Albany after January 16th. We hope he keeps his residence here and his membership with our chapter. We feel certain that his interest in Niagara Frontier will not lessen because of his new position.

Kings County

The following new members have been added to the roster of the Chapter: J. W. Wunsch, 841-63rd Street, Brooklyn, N. Y.; Matthew M. Becker, 134 Noll Street, Brooklyn, N. Y.; Max Goodman, 592-16th Street, Brooklyn, N. Y.; Robert F. Kief, 7512 Seventh Avenue, Brooklyn, N. Y.; Joseph D. Lewin, 99 Lafayette Avenue; Allen A. Sylvane, 612 Empire Boulevard, Brooklyn, N. Y

The following is reproduced from the Chapter Bulletin:

Nominating Committee Selections

The Nominating Committee of which Engineer Joseph Fertik is Chairman, is charged with the responsibility of selecting a complete slate of candidates for officers, directors, and succeeding members of the present Nominating Committee, to be elected at our Annual Meeting in April, which must be presented at the March meeting of the Chapter.

In addition to the five Chapter officers and five members of the Nominating Committee which must be chosen to serve for the ensuing year, six Directors are to be elected for a period of two years.

Since the Executive Board, composed primarily of the Chapter Officers and Directors, is directly responsible for the Administration of its affairs it is of the utmost importance that those selected to serve represent the views and opinions of the majority of our members.

The Nominating Committee will be grateful for any suggestions from members regarding selections of these candidates, whose names may be submitted in writing to the Chairman or the Secretary at 117 Remsen Street, as soon as possible.

Queens

Annual Meeting

The annual meeting and dinner held at the Forest Hills Inn on January 23, 1945 was attended by 75 members. Those who attended this meeting were unanimous in their opinion that it was most successful. One of the high points was the announcement that 25 new members were added to the Chapter roll during the year 1944.

We now have 150 members in good standing, ten percent of whom are in the armed forces.

Our Financial Secretary, Thomas J. Graham, wishes to remind the members that the 1945 dues are now payable.

We welcome the following Engineers who were elected to membership at the January meeting: Engineers Vincent McLean, Frank B. McKegney, George E. Spargo, Gustav M. Blom.

OHIO

Dayton Society

President's Greetings

As I move into the position vacated by our most capable past President, W. Ray Yount, I cannot help but feel honored to have been selected for this important post. But at the same time I am fully aware of the responsibility that accompanies the office, at this time when there is an urgent need for constructive and far sighted planning and action in the whole professional engineering movement.

"Your officers and the program committee have a very real problem in planning our meetings; we are limited somewhat due to the diversity of our membership, and yet we must have them both entertaining and informative. Your suggestions and criticisms will be sincerely appreciated, for our number one job must be to build up interest and attendance in our meetings.

"We believe that it is self-evident, but we feel that we are justified in again emphasizing the fact that no organization can be truly successful unless there is an active membership. Our progress during 1945, and in fact, the years to come, will depend not only on the decisions and efforts of your elected officers, but on the constructive thinking and effort that each member is willing to contribute to our cause.

"Every member should consider himself a committee of one to think, talk and promote professionalism for engineers. Thus we would revitalize our organization by obtaining new members and encouraging more active participation by our existing members. Then I would not hesitate to predict that 1945 will be a banner year, and that we will witness a decidedly healthy growth in our organization.

John D. Coleman

OHIO

SELECTS NEW OFFICERS

COLUMBUS — FEB. 15-16

Through the collaboration of Executive Secretary Chacey and the aid of the telegraph. The American Engineer is able to include the following in the March Issue of The American Engineer.

Details of the Convention are not available as this issue goes to the printer—February 16th. The next number of the Ohio Engineer will contain the complete story of the proceedings.

1945 OFFICERS

ALLISON C. NEFF, VICE PRESIDENT
Engineering Education at Case School of Applied Science, Asst. Engineer City of East Cleveland, Division Manager of Armco Drainage and Metal Products. Associate Member of A.S.C.E. President of Cleveland Chapter 1943-1944. O.S. P.E. Trustee. Member of City Council and City Planning Commission, City of Shaker Heights.

C. E. PETTIS, VICE PRESIDENT
B.C.E. and C.E. degrees from Ohio State University. Engineering department of N.Y.C.R.R. 1923-1932. Partner in the firm of Finkenbeiner, Pettis & Strout. Member of A.S.C.E. Held offices in Toledo Soc. Prof. Engrs. On numerous O.SP.E. committees. Member of Board of Trustees, Chairman of Professional Practices Committee.

JOHN F. HALE, PRESIDENT
Engineering Education at Ohio State University. At present Chief Engineer, Division of Engineering, Dayton. Member A.S.C.E. and Dayton Engineers Club. President Dayton Society, 1940. Trustee O.S.P.E. 1942-1944. Chairman, Municipal Section 1942. Served on various O.S.P.E. committees. Vice President O.S.P.E. 1944.

ELECTED AT ANNUAL MEETING

D.W. CONVERSE, SECRETARY
Engineering education Ohio State University. Employed by Goodyear Tire & Rubber Company 1916-1923. By Arthur G. McGee & Company 1923-1924. By Akron, Canton & Yougstown Railroad 1924-1944. Member American Railway Engineering Association past 15 years. Treasurer Akron Chapter 1944.

EXECUTIVE SECRETARY CHOSEN BY BOARD.

O.S.P.E. 1943-1944.

OHIO SOCIETY PROF. ENGINEERS

J. R. SHANK, TREASURER
Engineering Education Pennsylvania State College. Employed by Penn. Steel Co. Assistant-Dept. Civil Eng. Penn. State College. Designer N.Y.C.R.R. Awarded Leonard Wason medal for noteworthy research. Prof. Struct. Engrng. and Asst. Director Engng. Experiment Station O.S.U. Treasurer of

OKLAHOMA

10th Annual Convention

The tenth annual meeting of the Oklahoma Society of Professional Engineers, held in conjunction with other engineering and construction groups was, according to Secretary Ritzhaupt, an outstandingly successful affair.

January 12th and 13th were replete with planned activities. The press accounts received by the Editor of the American Engineer presaged eventful sessions. (Sorry only advance notices are to hand. News of what actually happened is limited to the Secretary's brief note).

The final banquet was attended by 900 persons. In the opinion of the Secretary, Vice President Mitchell of the National Society made a splendid presentation in behalf of National membership. An unusual incident was the attendance and participation in discussions of the Secretary of the Oklahoma Medical Association, who pledged the support of the medical profession to the Oklahoma Society of Professional Engineers in its endeavor to correct the inadequacies of the Oklahoma Sanitary Law.

The newly elected officers of the Oklahoma Society are: C. A. Stoldt, President; T. P. Clonts, First Vice President; Rex Collins, Second Vice President; M. B. Cunningham, Secretary; J. M. Gayle, Assistant Secretary; L. L. Dresser, Treasurer; C. S. Larkey, National Director; V. J. Bodovitz Attorney.

In his address retiring President Larkey reviewed the progress of the Society during the past year and urged complete affiliation with N.S.P.E. by all members.

Excerpts from the address follow:

At the last Annual Convention of the Oklahoma Society of Professional Engineers, our membership stood at 403 members, or approximately 38 percent of the total number of engineers registered in the State. During the past year, some 30 new members have been added bringing our present roster to 40 percent of the total registration. The Secretary tells me that we now have a membership of 431 engineers.

* * * * *

Early last year the proposed acceptance of Engineers-in-training as Junior members of the O.S.P.E., which had been approved by popular vote of the Society, was questioned on the grounds of its constitutionality from the standpoint of the Society as incorporated, and on the grounds of legality under the registration law The question was submitted to Attorney Bodowitz for an opinion, which was given to the Board at its June meeting. This opinion was to the effect that our *Constitution would not permit such membership, nor would the State law allow the use of the term "Professional Engineer" in designating any group other than duly registered Professional Engineers as defined by the statute, even though modified by the term "Junior," as was proposed.*

Thus we find ourselves still faced with the problem of caring for the young engineer during the interim between graduation and professional practice under the law. Doubtless this issue could be most satisfactorily resolved by appropriate legislation, and personally I feel that this course should be followed, if it is at all feasible. However, if this is not possible, then an independent organization could be set up for Engineers-in-training. This should be done at the earliest possible time.

* * * * *

In recent years there has been much legislation, both State and National, dealing with the standards of wages and salaries. On the part of Labor there has been a tremendous expansion of labor unions to insure workers adequate compensation for their services. On the part of professional men, the need for the establishment of uniform, fair standards of fees and salaries has become no less apparent, if they are to retain their independent professional status.

* * * * *

Another problem is that of coordinating our efforts with those of the National Society of Professional Engineers.

Many members feel that to belong to the State Society is enough, but a little thought will convince you, I am sure, that this is a mistake. Our success in placing Engineering on a par with the other great, learned professions depends upon the coordinated and unified efforts of the profession as a whole throughout the entire United States.

Never before in our history have we faced a more critical period of need for National representation as a professional body of men than now, both from the standpoint of holding the gains we hav made as well as from the standpoint of even greater progress in the future

We are on the threshold of transition from the greatest and most devastatingly destructive war that the world has ever known, to what will undoubtedly be the most difficult reconstruction period of all times. Our National congress will be beset on all sides by pressure groups unwilling to be denied; and if professional engineers are not protecting their prerogatives and needs, on a National scale, at such time, they will be trampled under foot and denied the opportunity of helping reshape the destinies of a great nation, except in a secondary manner, as has been very much their position in the past. We have a splendid opportunity ahead. Let's make the most of it through our National Society of Professional Engineers.

Time will not permit me to emphasize the need for National membership as fully as I would like to do, but I am sure, if you will take the time to give the matter some serious thought, you will find many cogent reasons why you *should* belong to the National Society and no sound reasons why you should not.

* * * * *

PENNSYLVANIA

Annual Meeting Enthusiastic

With acknowledgment to "Sparks" of the Harrisburg Chapter.

Annual Convention

The Tenth Annual Convention of the Pennsylvania Society of Professional Engineers was enthusiastically attended by representatives of the various Chapters from all sections of the Commonwealth. The keynote of the meeting was based upon the preamble of the constitution of the National Society which states that the ideal of the organization is to promote public welfare. The new president has assumed the reponsibility of his routine duties, and in addition, is making supreme efforts to formulate a new bill to be presented to the legislature now in session, which will elevate the standing of the profession of engineering in Pennsylvania.

Engineer Kennedy from Cleveland, Ohio, explained in detail how their Society of Professional Engineers was organized and expanded to foremost place in membership of any state in the union. His plan involved a series of publications setting forth the prerogatives of the society. These documents include a constitution, code of ethics, roster of eligibles and of members and a treatise on rules and methods for procedure governing the chapters.

Engineer Larson from Washington, D.C., representing the National Society, stressed upon the necessity for the promotion of public welfare, by bona fide, registered professional engineers. Organized effort is the only means by which the standing of the professional engineer can be brought to his rightful place with dignity. The machinery is set. Membership only will promote it.

Mr. Chalfant, Secretary of Commerce of Pennsylvania, spoke to the society concerning the post war planning of the Commonwealth. He explained how comprehensively the subject has been handled and how far-reaching the program. He cited plans pertaining to schools, public buildings, highways, forests and streams which will involve some $700,000,000 over a period five years. All of this work is a matter of vital interest to the professional engineer.

The meeting was well attended, speakers were enthusiastically received and a most ambitious program for 1945 was formulated.

The Harrisburg Chapter was awarded the Ritchie Lawrie, Jr. Membership Plaque for foremost advancement in membership.

Harrisburg Chapter

Anticipates Active Year

The appended news items have been excerpted from the chapter bulletin "Sparks":

President's Message

"You have graciously elected me President of the Harrisburg Chapter. I appreciate the honor.

To make this another successful year I earnestly hope that each member will do everything in his power to further the interest of he Chapter. It seems to me that this year we should make a special drive for membership in the Chapter, and also urge qualified engineers to apply for registration as professional engineers.

To date the National Society, State Society and Chapter have made a fine record. Let us keep up the good work. Numbers count, and I am counting on your cooperation. *George B. Baines 3d.*

Officers—1945

George B. Baines, 3rd	Guy R. Johnson, V-Pres.
3112 Green Street	2247 N. Second Street
Harrisburg, Pennsylvania	Harrisburg, Pennsylvania
Charles E. Parry, Secretary	Edgar A. Weimer, Sr., Treas.
814 N. Second Street	2029 N. Second Street
Harrisburg, Pennsylvania	Harrisburg, Pennsylvania

Directors

George A. Rahn (State)	Kenneth H. Caskey
Walter S. Giele	Karl L. Gatter
Warren K. Myers	Benj. A. Johnson

Philadelphia Chapter

Recommends Full Time Secretary

At the last meeting, of which the American Engineer has a report, the Philadelphia Chapter passed a resolution favoring a full time paid secretary for the Pennsylvania Society. The trend is nationwide.

Pittsburgh Chapter

1945 *Calendar*

Board of Direction—Meeting Second Thursday of each month
Weekly Luncheon—Meeting Every Monday at 12:00 Noon—"The Little Dining Room", 212 Oliver Avenue
Chapter Meeting—Third Thursday of each month

News Items

Arrangements have been made whereby there will be two prizes for persons obtaining new Chapter Members during 1945. The prizes are two National Society Emblems. One is to be awarded to the member obtaining the greatest number of new members during 1945 and the second to the member obtaining the next highest number of new members. So on your mark and away. This is February eleven months to go. Do we give these fellows some competition or do we not? Just plain cut throat.

The work of preparing a new Engineer's Registration Law is going forward. We all know these things cost money so don't forget to send your contribution to the Executive Secretary, 29 South Third Street, Harrisburg, Pa.

The Pittsburgh Chapter ranked third in the State Society Membership Competition this year. The Ritchie Lawrie Membership Shield was awarded to the Harrisburg Chapter after being held two years by the Midwestern Chapter. Let's bring it to Pittsburgh for 1946.

Chapter Officers And Directors

President, David Camilli	Directors
Vice-President, Philip Price	George T. Bruun 45
Secretary, Benjamin H. Aires	Charles F. Houlihan 45
Treas., Raymond I. Lachman	Harold Parks Medley 46
State Dir., John R. Shoffner	John J. Murray 46
Past Pres., Earl S. Fenelon,	Robert A. Blackburn 47
Martin C. Knabe	John W. Brown 47

From the Pittsburgh Engineer comes the following selected tems

A Message From The Chapter President

With the going of the old year and the coming of the new, it is customary to make some resolutions. What are our resolutions in regard to our chapter and society? Are we going to let things go by without taking any action? We certainly do not agree on the "laissez faire" attitude of members of a dying organization—we are young, we have aims and we intend to achieve them.

1st—The enactment of the new registration law.

2nd—Membership

To solve these problems we need the cooperation of all the members, and if some are asked to help a little, they should not refuse. We do not want your dues without your active participation. We would rather hear your criticism than be forgotten, so let us resolve to attend the monthly meetings, to talk to friends about our group and have them attend our affairs, and keep after them until they become active members.

When you are called to serve on a committee, take your appointment as an honor, fulfill your obligations faithfully and with enthusiasm, and follow the example of Aires, Paine, Bruun and others who have served for so many years with admirable perseverance. Please do not take what I say as one who likes to give advice, but most of us have during the past years drifted away from the chapter without cause. We all have an investment in our profession, let us protect it because that is good business.

David Camilli, President

Help The Special State Society Fund

RHODE ISLAND

Urges Wider Circulation

From the Secretary of the Rhode Island Society copy of the following resolution is at hand:

Whereas, the Rhode Island Society of Professional Engineers has during the past year made it a practice of mailing the extra copies of the *American Engineer* received from the National Headquarters to libraries of engineering schools in Rhode Island, to engineering society libraries and to public libraries, and

Whereas, the Rhode Island Society of Professional Engineers firmly believes that sending the *American Engineer* to above mentioned institutions is highly beneficial to the dissemination of knowledge pertaining to the professional engineering movement, and

Whereas, the receipt of extra copies of the *American Engineer* from the National Headquarters is not regular or assured, thus hampering the proper distribution of the Society Magazine,

Now Therefore Be It Resolved, by the Rhode Island Society Of Professional Engineers at its meeting held in Providence on December 15, 1944, that it respectfully request the *Board of Directors Of The National Society of Professional Engineers* to consider the advisability of sending regularly and direct from the publisher copies of the *American Engineer* to libraries of engineering schools, colleges, public libraries and engineering societies throughout the country, an

Be It Further Resolved, that in order to establish the mailing list the National Society Of Professional Engineers request every State Society to submit a list of names and addresses of institutions in the respective states to which the *American Engineer* should be sent, an

Be It Further Resolved, that effort be made to procure such list also in states where a society of professional engineers is not presently organized.

I hereby certify that the within and foregoing resolution is a true and correct copy of the resolution adopted by the Rhode Island Society Of Professional Engineers at its meeting of December 15, 1944.

Please Mr. Secretary—How about some other items from Rhode Island! Editor

WISCONSIN

Officers for 1945

Secretary O. J. Muegge has transmitted the following for publication:

The officers of the Wisconsin Society of Professional Engineers for 1945 are as follows:

President, Wm. J. Urban, The Falk Corp. Milwaukee 8, Wis.; First Vice President, E. W. Seeger, Milwaukee; Second Vice President, Archie E. Becher, Wausau; Past President, M. O. Withey, Madison; Secretary, O. J. Muegge, 656 Crandall St., Madison 5, Wis.; Treasurer, L. M. Schindler, Appleton; Director 1944-45, Hans P. Dahlstrand, Milwaukee; Director 1944-45, W. A. Peirce, Racine; Director 1945-46, Charles J. Campbell, Neenah; Director 1945-46, George Martin, Green Bay; Nat'l Representative, L. E. Peterson, 312 E. Wisconsin Ave., Milwaukee 2; Alt. Nat'l Representative, Ben Elliott, Madison.

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P.E. No. 7818
Attorney and Counsellor at Law
New York, Massachusetts, Federal Bars
Engineering and General Practice
Woolworth Building — New York City

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Corporation Practice Of Engineering

(Continued from Page 9)

delegated without consent, and it cannot exist between an attorney employed by a corporation to practice law for it, and a client of the corporation, for he would be subject to the direction of the corporation, and not to the direction of the client. . . . The corporation would control the litigation, the money earned would belong to the corporation, and the attorney would be responsible to the corporation only. His master would not be the client but the corporation, conducted, it may be, wholly by laymen, organized simply to make money and not to aid in the administration of justice, which is the highest function of an attorney and counsellor at law. The corporation might not have a lawyer among its stockholders, directors, or officers. Its members might be without character, learning, or standing. There would be no remedy by attachment or disbarment to protect the public from imposition or fraud, no stimulus to good conduct from the traditions of an ancient and honorable profession, and no guide except the sordid purpose to earn money for its stockholders. The bar, which is an institution of the highest usefulness and standing, would be degraded if even its humblest members became subject to the orders of a money-making corporation engaged not in conducting litigation for others. The degradation of the bar is an injury to the state.

"A corporation can neither practice law nor hire lawyers to carry on the business of practicing law for it any more than it can practice medicine or dentistry by hiring doctors or dentists to act for it. People v. Woodbury Dermatological Institute, 192 N.Y. 454; 85 N.E. 697; Hannon v. Siegel-Cooper Co., 167 N.Y. 244, 246, 60 N.E. 597, 52 L.R.A. 429. The Legislature in authorizing the formation of corporations to carry on "any lawful business" did not intend to include the work of the learned professions . . . which for time out of mind have been given exclusive rights and subjected to peculiar responsibilities."

The only reason that we can find why corporations cannot practice a profession and yet are allowed to practice engineering is because practically all of the engineering registration acts contain an expressed provision allowing them to do so. If there were no such expression in the law which binds the Court to interpret the will of the Legislature, the case would be decided upon common law and there are innumerable decisions based upon common law which prohibit the practice of a profession by a corporation. It is further evident that States have the power to prohibit the practice of a profession by a corporation, and statutes which, in so many words, deny to corporations already engaged in such practice the right to such practice are valid since they merely confirm the already existing common law. Since a corporation is a creature of the State, the State has the right to legislate it in or out either way as it sees fit.

We should not confuse the above considerations with the practice of engineering within or for a corporation on its own land and its own property, although the States have the right to say that such work be done by registered engineers if the safety and welfare of the public is involved; but to allow a corporation to practice engineering indiscriminately by merely having the plans signed by a registered engineer is detrimental to the interests of the client, the public and the engineer; and, as long as such practice continues, the engineer will remain in his present niche somewhere between a trade and a profession, having all of the liabilities of both but few of the assets of either. Similarly, it is evident that a professional engineer, practicing his profession and employed by a government subdivision or a corporation for its own work, is serving such employers directly and has no trust relationships except with such employer. This is a tenable position in professional procedure. But, if the employed professional engineer is to serve an outside client, then a third party enters the consideration and the originally mentioned divided loyalty, which is incompatible with professional practice, ensues.

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Post War Engineering

(Continued from Page 8)

may look marvelous to you, but it is not important to try to convince your client about its advantages at least not before you have the contract signed. I would like to illustrate this point with a little incident that happened to me when I was in Paris. One day I was entertaining an American couple and showing them the sights of the city. When driving down Champs Elyses, the magnificent avenue which leads from the Arch of Triumph to the Place de la Concorde, I turned to the lady beside me and asked what she thought of the little street. She looked from one side to the other and then said: "Well, I think that Penn Avenue in Pittsburgh is just as wide, and I am sure it is longer."

You will also find that business is sometimes done in a very surprising way, and I would like to tell you one of my own experiences just as a warning:

Once I was sent to Rome to investigate a proposition submitted to my company by an Italian Bank in America. The project consisted of modernizing coal unloading equipment in Italian harbors. The existing conveyor system consisted of lines of women carrying baskets of coal on their heads. The installations were estimated to cost around ten million dollars, half of this sum to be furnished by the Italians.

Upon my arrival in Italy I found that the man supposed to be the head of the Italian group of financiers was a former coal dealer, who now was a hotel keeper in Rome, and his arrest was expected any day for passing worthless checks. During our interview he stated he had no associates, that all the money must be furnished by the Americans, and that he reserved for himself the position of President of the new company. I told him that he had misrepresented the whole situation and that as far as I was concerned he could keep his hotel and we would keep our money. He then suggested that maybe ten million dollars were not necessary; nine would do, and he offered the one million thus saved to me for my personal use. I told him that my financial situation was such that one million dollars more or less did not make any difference to me, and refused his kind offer. That stunned him. The moral of this story is obvious. Don't accept a bribe—if you have to furnish the money yourself.

Advice No. 3. As a general guide to correct and ethical behavior for a Professional Engineer, both at home and abroad, I can recommend the Ten Commandments. These rules may be old, but they are still very sound.

In a few words I have tried to give you an idea of what is in store for us American engnieers. This preview of things to come is of necessity far from complete, but I feel that the opportunities are there. Let us take both the opportunities and the responsibilities. The other day at the 10th Annual Convention of our National Society in New York, I heard Major de Seversky, the famous aviator and engineer, make some very pertinent remarks about the position of the engineers in our civilization. He said that until now the engineers who are the builders and the creators of our modern way of life are placed in a subordinate position; they are told what is wanted by the bankers and the business men, while it should be the other way around. I think we all agree that it is "time for a change." While working for this change let us get on with the job at hand. Let us bend all our efforts first to help win the war and then, when victory is won, to build a lasting peace.

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Hart Crane And The Bridge

(Continued from Page 12)

And obsure as that heaven of the Jews,
Thy guerdon . . . Accolade thou doest bestow
Of anonymity time cannot raise!
Vibrant reprieve and pardon thou doest show.

O harp and altar, of the fury fused,
(How could mere toil align thy choiring strings!)
Terrific threshold of the prophet's pledge,
Prayer of pariah, and the lover's cry,—

Again the traffic lights that skim thy swift
Unfractioned idiom, immaculate sigh of stars,
Beading thy path—condense eternity:
And we have seen night lifted in thine arms.

Under thy shadow by the piers I waited;
Only in darkness is thy shadow clear.
The City's fiery parcels all undone,
Already snow submerges an iron year

O Sleepless as the river under thee,
Vaulting the sea, the prairie's dreaming sod,
Unto us lowliest sometime sweep, descend
And of thy curveship lend a myth to God."

Thus the Bridge begins as a man-constructed thing, and then, in its beauty and its power, it becomes a dream-evoking symbol of the imagination. It recalls the vision of Columbus—the mystic navigator who spanned the gulf between two continents. As the poet awakes in his room above the harbor and walks through the lonely Brooklyn streets at dawn, historic and romantic figures of the past approach the transfigured world of today. Then the mind speeds along a river of steel rails bearing America's civilization westward—following the burdened trudge of the pioneers and the march of the workers with flashing glimpses of all their worlds of factory and song. From the huge travail of a continent, America's flesh becomes spirit—as boyhood memories of star and lakes are recalled. After this parabolic flight of the imagination through space and time, the poet is back in ribald South Street, Manhattan, near midnight, carousing with sailors who bring him snatches of song of Stamboul and Atlantis. Returning home across the Bridge, he feels the spell again and lets his fancy swing afar to images of clipper ships and China seas. The curving timeless path then carries thought back to the geologic ages that lifted the Appalachians above the waters; and from that cosmic struggle the soaring spirit leaps forward and upward to the birth of the airplane—man's flight through space—and then to the song in man's heart—Walt Whitman and the open road. The poet leaves the Bridge and its far-flung dreams at midnight, comes down to earth, and enters a Tunnel—symbolizing America moving in dynamic direction, until the plunging subway darkness emerges with the freedom and beauty of the vaulting Bridge. The roarnig blackness of the Tunnel gives us man in the industrial hell which the machine has made; now let the man-created dynamism of the machine, transmuted into the skyward soaring arc of the Bridge, be a godlike Hand to liberate Man and lift him toward the stars.

The final section of the poem—*Atlantis*—is a transposed return to the beginning, completing the cycle, linking Atlantis with Cathay. The Bridge now becomes again an absolute experience, linking man, beyond time, with Truth:

"Through the bound cable strands, the arching path
Upward, veering with light, the flight of strings,—
Taut miles of shuttling moonlight syncopate
The whispered rush, telepathy of wires.
Up the index of night, granite and steel—
Transparent meshes—fleckless the gleaming staves—
Sibylline voices flicker, waveringly stream
As though a god were issue of the strings . .

And through that cordage, threading with its call
One arc synoptic of all tides below—
Their labyrinthine mouths of history
Pouring reply as though all ships at sea
Complighted in one vibrant breath made cry,—
'Make thy love sure—to weave whose song we ply!'
—From black embankments, moveless soundings hailed,
So seven oceans answer from their dream.

* * * *

So to thine Everpresence, beyond time,
Like spears ensanguined of one tolling star
That bleeds infinity—the orphic strings,
Sidereal phalanxes, leap and converge;
—One Song, one Bridge of Fire! It is Cathay,
Now pity steeps the grass and rainbows ring
The serpent with the eagle in the leaves . . . ?
Whispers antiphonal in azure swing."

N.S.P.E. Board Meeting

(Continued from Page 14)

as it does the medical and legal professions.

5. The Illinois Society presented a resolution, requiring the Board of Directors of the National Society to instruct its Executive Secretary to direct special communications to all Member State Societies on matters requiring special attention as the result of Board action. This resolution was presented in order to obviate the necessity of the State Societies reading through the entire records of the meetings of the Board of Directors in order to pick out items which require action by the State Societies, and with the further thought that a letter from Society Headquarters on these matters will carry more weight than merely reading these items in the Board meeting. This resolution was passed.

The Board also approved the appointment of Mrs. Lacey Coad as Office Manager of the Society Headquarters in accordance with the following recommendation by the Executive Committee:

In order to relieve the Executive Secretary, Mr. Larson of administrative detail and procedure and thereby permit him to devote his attention to matters of policy and organization, the Executive Committee recommends that the Board instruct the Executive Secretary to create at once the position of Office Manager and to delegate to the said position of Office Manager complete responsibility for the administrative details and operational procedure of the Washington Headquarters Office.

The Executive Committee recommends to the Board that Mrs. L. W. Coad be appointed Office Manager.

The Executive Committee further recommends to the Board that the Special Committee appointed by the Executive Committee to consider this organizational procedure be continued in an advisory capacty.

Signed: Special Committee
Vice President Lawrie
Treasurer Cleary
President Nold

The Executive Committee further recommends that the Board record their appreciation of the past services of Executive Secretary Larson and Mrs. Coad and their confidence in their ability to carry out their newly defined assignments stated in the previous resolutions.

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WHAT'S NEW

And Coming In The Whirl Of Change

(News from industry — gathered by the publisher)

OILITE EXPANDS CORED AND BAR LINE

To aid the war effort, addition of several dozen new sizes of cored and solid bar stock in Oilite materials has been announced by Chrysler Corporation's Amplex Division. Wide acceptance and tremendously increased use of the self-lubricating Oilite Bronze and ferrous base Super-Oilite in bar form were given as the reasons for the expanded size list. The new sizes embrace a range of 3/8" to more than 12" in diameter. Heavy demand of Oilite and Super-Oilite materials has been laid to their obvious advantages over cast cored and bar stock. Most important advantages of the Oilite bar stock are the features of self-lubrication and greater load carrying capacities.

The broad-scale war production use of cored and bar stocks stems mainly from their fulfillment of three vital requirements. With a bin of various sizes of self-lubricating cored and solid bars on hand a plant is equipped to make rapid bearing replacements on a breakdown, provide the necessary replacement for a faulty bearing installation, and give the engineer or production man the means of quickly securing a bearing for experimental needs.

It has been estimated by Chrysler's Amplex Division that their line of cored and bar stock is saving war plants thousands of man hours a month by providing quick and lasting bearing replacements for machines that otherwise would be shutdown by recurrent bearing failures.

Although Oilite differs from cast materials in that it is made from metal powders and impregnated with oil, the cored and bar pieces are machined just like a cast bearing.

Oilite cored and solid bars are now being stocked in all major cities of the United States and Canada. For complete information on Oilite cored and bar stock write for a new booklet to Amplex Division, Chrysler Corporation, 6501 Harper Ave., Detroit 11, Michigan.

Now in production on self-lubricating cored and solid bar units up to 95 lbs. in weight, Chrysler Corporation has announced an expanded bar stock size list on its Oilite Bronze and ferrous base Super-Oilite. Merva Wilson, above, is shown with some of the giant Oilite units, many of which are the latest in large size cored and solid bars.

For a new size list write Chrysler Corporation, Amplex Division, 6501 Harper Avenue, Detroit, Michigan.

SYNTHETIC RUBBER PROVING GOOD REPLACEMENT FOR NATURAL RUBBER AS ABRASIVE WHEEL BOND

Once again a production crisis resulting from the loss of our natural rubber supply has been averted by synthetic rubber, according to the Hycar Chemical Co., Akron, Ohio.

The bonding material for abrasive wheels up to the time of Pearl Harbor had been tree rubber, Hycar pointed out, and manufacturers were apprehensive less a satisfactory substitute might not be found.

Recent reports from abrasive wheel manufacturers, however, establish that a special-purpose synthetic rubber has been developed which permits the manufacture of fast-cutting, long-lasting abrasive wheels for the metal working trades. These reports were summarized by Hycar, world's largest independent producer of synthetic rubber from butadiene.

Interest in rubber has been largely concerned with automobile tires, without too much thought of the innumerable industrial operations also dependent on rubber. A typical illustration of what rubber bonded abrasive wheels mean to industry was included in one of the reports to Hycar.

A single wheel—and there are thousands of them in use in manpower-short foundries—will do the work of 15 metal bandsaws on cutting off gates and risers on non-ferrous castings, the report said. Multiply this one illustration by the thousands of other applications for abrasive wheels in industry to get an idea of what they mean to war production.

Results of tests conducted by the abrasive division of West Company, Inc. were reported to Hycar as follows:

"Manganese bronze castings were cut with a natural rubber-bonded wheel making 50 cuts for a total of 562½ square inches. A Hycar-bonded wheel on the same work made 99 cuts for a total of 1013¾ inches, practically doubling the output. Each wheel was 16 inches in diameter by ⅛ inch thick, operating at 16,000 surface feet per minute, 3800 revolutions per minute spindle speed."

The same company's test on aluminum bronze castings were to take 10 cuts each with a natural rubber wheel and the special-purpose synthetic rubber wheel. Results reported were that the wheel bonded with Hycar cut 141 square inches and that the wear was .43 square inches per square inch of metal cut in comparison with the natural rubber-bonded wheel which cut 112 square inches and showed a wear of .627 square inches per square inch cut.

Two views of a West abrasive wheel cutting a non-ferrous casting are shown in Figs. 1 and 2. This Hycar-bonded wheel, the manufacturer said, cut a cross-section of 21 square inches in 45 seconds.

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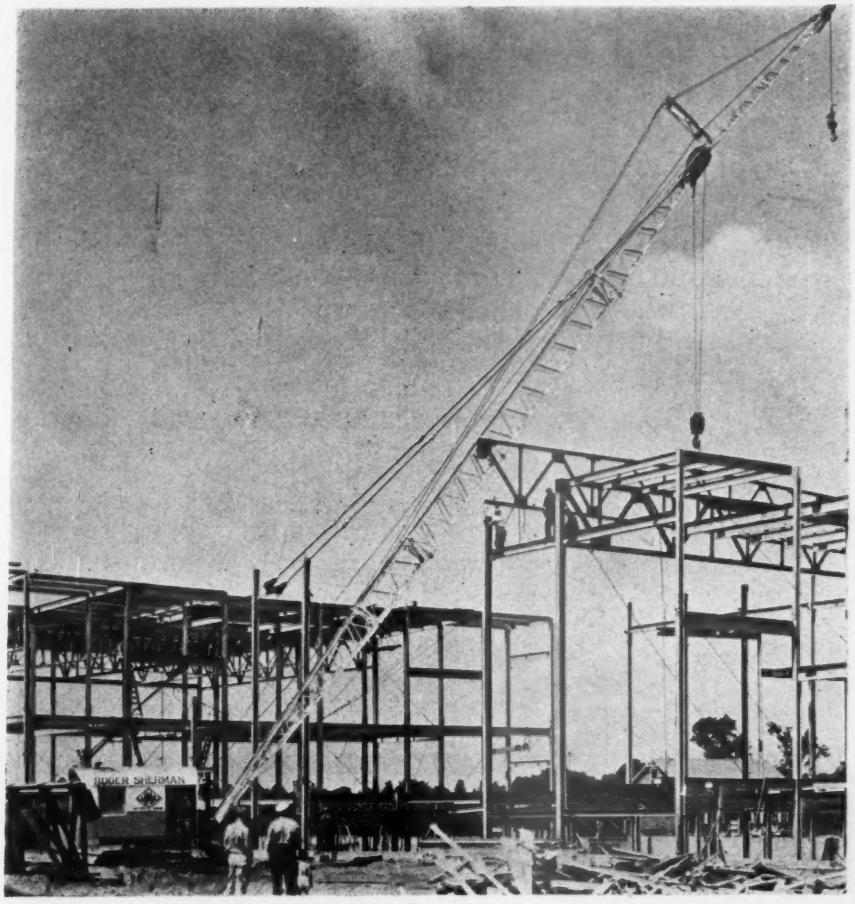

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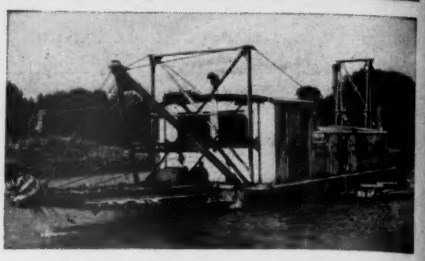

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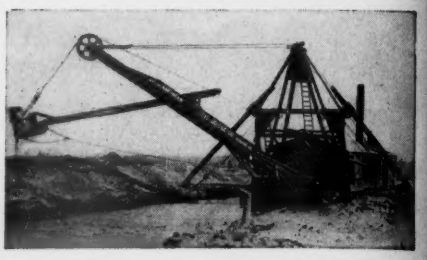

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